RAILWAY echanical and **Electrical Engineer**

FOUNDED IN 1832 as the AMERICAN RAILROAD JOURNAL

Published monthly by

Simmons-Boardman Publishing Corporation

1309 Noble Street, Philadelphia, Pa., Editorial and Executive Offices 30 Church Street, New York 7, and 79 W. Monroe Street, Chicago 3.

SAMUEL O. DUNN, Chairman Emeritus, Chicago JAMES G. LYNE, President, New York

J. S. CRANE, Vice-Pres. and Sec., New York

C. MILES BURPEE, Vice-Pres., New York

H. H. Melville, Vice-Pres., Cleveland C. W. Merriken, Vice-Pres., New York

JOHN R. THOMPSON, Vice-Pres., Chicago ROBERT E. THAYER, Vice-Pres., New York

H. E. McCandless, Vice-Pres., New York ARTHUR J. McGinnis. Treas., New York

RALPH E. WESTERMAN, Asst. Treas., Chicago

Cleveland 13 Terminal Tower

Washington 4 1081 National Press Bldg.

C. B. PECK, Editor, New York

H. C. WILCOX, Managing Editor, New York

A. G. OEHLER, Electrical Editor, New York

E. L. WOODWARD, Western Editor, Chicago

C. L. Combes, Associate Editor, New York

G. J. WEIHOFEN, Associate Editor, Chicago

C. W. MERRIKEN, JR., Vice-Pres. and Business Manager, New York

The Railway Mechanical and Electrical Engineer is a member of the Associated Business Papers (A. B. P.) and the Audit Bureau of Circulations (A. B. C.) and is indexed by the Industrial Arts Index and also by the Engineering Index Service.

Index to Volume 124 1950



INDEX, 1950

VOLUME 124

A		Anchor Post Products, Inc., Coolant heater	232*	В	
Abbott, W. E.			687		
Ampere-hour meter (N. Y. C.)	451*	Ansul Chemical Co., Dry Chemical hre ex-	228*	Babcock and Wilcox, Waste heat boiler for gas turbine locomotive	5*
Blueprint holder	207*		433	Baldwin Locomotive Works, Inc.	****
Boiler compound storage box	221*	Armature wedges, Traction motor, Removing, by C. F. Steinbrink	526*	Diesel-electric locomotive, Standard line Recorder, Strain, Strip-chart	566* 226*
Portable light stand	525	Armature winding, Procedures for, by C. F.		Strain indicator	415*
Stencil holder for metal signs	222*	Steinbrink	389* 530*	Strain indicator Universal hydraulic testing machine Ballman, H. C., Co-ordination in control of	109*
Bureau of Locomotive Inspection report	127	Armco Steel Corp., Freight car flooring Aro Equipment Corp., Portable mixing motor	230*	railroad smoke	681
Derailments and their causes, by P. J. Hogan	134	Ash pans, Steam locomotives, Self-cleaning .	101	Baltimore & Ohio:	42*
Explosions! Locomotive conditions improved	1525	Association of American Railroads: Central Railroad Research Laboratory	416	Car, Sanding, for Diesel locomotives Conveyor, Wheel, Car, Gravity	37*
Union Pacific derailment	93 § 469	Circular letters: Truck side frames		Jigs for connecting rods	278*
Aero-Motive Manufacturing Co., Flex Lite		class I equipment orders	726* 171	Press for shortening drawbars Bangor & Aroostook, Pulpwood Freight Car	156* 251*
Aeroquip Corp., Hose line assembly machine	52* 611*	Engineering Div., Electrical Section:		Barber-Colman Company, Grille controls Barco Manufacturing Co., Recorder for	467
Air conditioning, Car, operation and mainten-		Program, 1950	617 448	Barco Manufacturing Co., Recorder for	597*
ance (C.D.O.A.) Air conditioning equipment, Car report (Elec.	652	Freight Claim Division; National Pre-		switch locomotives	
Sec.)	634	vention Committee: Leaky cars Mechanical Div.:	151§	nett P., Dr., Air-pollution research director Batteries:	172
Air Reduction Sales Co.:	530	Addresses:	405	Flashlight, Union Carbide and Carbon	
Arc welding, Aircomatic metallic	109	Aydelott, J. H., Safety and service Barriager, I. W., Safety	425 425	Corp	530* 269*
Alloy, Brazing, Airolite 59 Arc welding, Aircomatic metallic Monograph No. 3 shape-cutting machine Welder, 200-amp., Engine-driven	61*	Aydelott, J. H., Safety and service Barrigger, J. W., Safety Davidson, E. H., Locomotive and		Handling of, with pallets (N.Y.C.) Nickel cadmium, Nickel Cadmium Bat-	
	231*	safety problems Galloway A. K., Maintenance costs Underwood, K. C., Railroads and	425 426	tery Corp.	759* 736*
for solderless terminals	530*	Underwood, K. C., Railroads and		Storage, Charging, by K. A. Vaughan . Battery-charging equipment, General Electric	465*
pansion control	52	Brown R M. Elected chairman	425 426	Battery charging equipment, General Electric Battery field resistor (T.&P.) Baxter, H. W., General car inspection	519*
Alarm device, Hot-box, Twinplex (N.Y.C.)	55	Browning, A. C., retires	112*	Bearing puller and ram, Diesel locomotive	287
Alarm devices, Hot box (Mech. Div.) Albin, J., Automatic instruments test engine	431	Ciliske, A. I., appointed assistant se-	112	wheel (Erie)	43*
performance Allenhurst, J. C., Design for a small shop Alley Regging Aircelite 50 Air Reduction	72*	Electrical Section :		Bearing, Steam Locomotive, Caapcity of Bearings, Motor, Diesel Reclaiming	100 571*
Alloy, Brazing, Aircolite 59, Air Reduction	510*	Programs, 1950	617 448	Bearings Traction motor	4028
Sales Co	530	General Committee approves journal	410	Beatty Machine & Mfg. Co., Air activated multiple punch	51*
Aluminum alloy in car construction	411 717*	bearing emergency specifications	701 112*	Belt, Conveyor, for removing scrap iron from	
American Brake Shoe Co., Wheel controller American Car & Foundry Co.:	577*	Peronto, Fred, appointed secretary Progress	4618	press, (Despatch Shops, Inc.)	556* 351*
Cars. Hox (II P.)	564*	Reports:	432	Bench, for cleaning cylinders (N.Y.C.) Benton, E. D., Coal characteristics and per-	
Diner, I win-unit (Fenn.)	205"	Arbitration Brakes and brake equipment	438	formance of road locomotives	683
Sleepers, Aluminum	188* 551*	Car construction	434	Biddle, James G., Company Testers:	
American Institute of Electrical Engineers:	331	Cars, Tank	436*	Insulation	597*
Coho, O. C., Rotating electric equipment for gas-turbine loco.	337*	Geared hand brakes	439	Resistance Bishop Manufacturing Corp., Electrical tape	468* 168
fillboard, Whittaker and Ames, Rectifier	337	General committee	426 431	Bituminous Coal Research, Inc.; Locomotive	
Reed, J. R., Solderless commutator joints	150	Locomotive construction	443	Development Committee: Coal, Pulverized, for experimental gas-	
for railway traction armatures	202*	Lubrication of cars and locomotives	430	turhine	54*
Warrick, T. J., Control system for gas	76*	Lumber loading Prices for labor and materials	444	Turbine, Gas, Coal-burning, by John I. Yellott	245*
American-Larrance-Foamite Corp., Carbon-		Safety appliances	443	Blade tips, Centerless grinder, Diamond and	
dioxide fire extinguisher	759*	Specifications for materials	442	Tools, Inc. Boards, Floor, Warped, Device for straighten-	359*
nre-control for Diesel locomotives	49	Wheels Mechanical and Engineering Divisions; Electrical Section:	440	ing (Wabash) Boggess, T. R., Electroplating of wearing	40*
American Locomotive Co.: 1,600-hp. dual purpose road freight Diesel		Electrical Section:		Boggess, T. R., Electroplating of wearing parts	333*
(G.E.) 1,600-hp. road switcher	739*	Reports: Automotive and electric rolling		Boiler checks, Steam space spray	
Questions and answers, Diesel-elec-	507*	stock Car air conditioning equipment	637* 634	(M.B.M.A.) Boiler compound storage box, by W. E. Ab-	668
tric	752	Car electrical equipment	031-	Dott	44*
Tests, Gas-turbine-electric American Optical Co., Respirator hood	172 759*	Electric heating	629* 622	Boilers, Locomotive:	
American Railway Car Institute:		Electrolysis	622	and tenders, Coating interior of (M.B.M.A.)	666
Wright, Charles W., elected president	702	Illumination Motors and controls and shops Overhead transmission line and	624*	Questions and answers, by George M.	
American Society of Mechanical Engineers:		catenary construction	623	Davies: Back head radius, Determining	158*
Gas Turbine Power Div.: Brecht, W. A., Charles Kerr, Jr. and T. J. Putz, 4,000-		Power supply	619	Brackets for leveling boilers	158
hp. gas turbine passenger locomotives	1*	Radio and communication on roll- ing stock	624	Brick arch, Necessity for Ferrules, Tube, Sheet, Long, Purpose	224
Oil & Gas Power Division: Brehob, F. H., Starting requirements for locomotive		Track and third rail bonds	622	of	224
engines Program, 1950	381	Wire, Cable and insulating ma-	631	Holes, Tolerance for reaming Patch for crack shell plate	100
Program, 1950 Mitchell F K	702	terials	618	Patch for throat sheet crack	754*
Railroad Division: Mitchell, F. K., Attracting and holding engineering		Boxes, Hot, Cause of	349*	Patch plates, Tensile strength of Rivets, Aluminum, Shearing strength	754
graduates Railroad Division officers	6, 35\$	Jig, Calibration, for torque wrenches	572*	of	46
American Steel Foundries; King Machine	33	Power supply for train radio	104* 271*		754
Tool Div.: Lathe, Geared head, Long bed	203*	Traction motor maintenance practices 520	586	Sheet cracks, Throat, Welding	45
Mill boring, Diesel wheel American Welding Society:	467*	Track and third rail bonds Welding and cutting Wire, Cable and insulating materials Atchison, Topeka & Santa Fe: Boxes, Hot, Cause of Jig, Calibration, for torque wrenches Pneumatic press for draft gear repairs Power supply for train radio Traction motor maintenance practices 520' Vat, Lye and rinsing platform Atlantic Metal Hose Co., Tank car unloading coupling	157*	Seating tubes and flues Sheet cracks, Throat, Welding Shell patches, Thickness of Shell seam, Efficiency of Smokeboxes, Life of	355
American Welding Society: Papers:		ing coupling Atwell, C. A., Performance of Diesel loco-	533*	Smokeboxes, Life of	100 355*
Di Liberti, E., Arc welding in railroad	1	motive generators	458*	Stays, Welding, on the side	410
Gannet, H. E., Welding aluminum and	407*	motive generators	4600	Strength, Does shape determine	412 224
cast iron parts	153*	tion Axle failures	466* 275\$	Tolerances for punched holes	158
cast iron parts Gannet, H. E., Welding stainless stee	1600	Axles:		Tubes, Arch, Application of	45
car members Grant, L. E., Evolution of welded box	163*	Cleaning, with flame and wire brush Locomotive, Steam, cracked in journals	217* 594	Vanes in draft pipes Welding, Seal, in fireboxes Welded, Repairs to	100
Ames. E. W., Rectifier type motive power	66*	Roller bearing, Diesel, Finishing (South-		Welded, Repairs to	355*
(A.I.E.E.)	141*	Roller hearing, Finishing (N.V.C.)	748*	Boilers, Train heating (see Heating equip-	

• Illustrated article; \$ editorial; ‡ communication

Blooks:	Car—(Commuea)	5918	Hose, Locomotive, Lee Rubber & Tire	
Electrical Engineers' Handbook (Electric Power) 35	Car department problems in 1950	348	Corp.	468
Freight Train Handling Instructions 751 Heating, Ventilating and Air-Conditioning Fundamentals 276	Car Foremen's Association of Chicago (see Clubs & Associations)		Polisher, Sleeve, AB piston Powdered cleaner, Pennsylvania Salt	165*
ing Fundamentals 276	Car, Freight: Is it a finished product?	3468	Mtg. Co	108
Heating, Ventilating, and Air Condition-	Car, Freight, outlook Car members, Stainless steel, Welding	2748	vat, Lye, and rinsing platform (Santa	157*
Kent's Mechanical Engineers' Handbook 463	(A.W.S.)	163*	Cleveland Union Terminal, Electric heating	
Lathe Operators' Hand Book 95 Pocket Encyclopedia of Atomic Energy		106*	cable	32 192*
Questions and Answers on 24-RL Brake	Carothers, G. E., Testing brakes on long		Clubs & Associations:	
Railroad Inspection Manual	trainsCars:	102	Car Foremen's Association of Chicago: Baxter, H. W., General car inspection Gravenstuk, George, Order car selec-	207
Welding	Freight:		Gravenstuk, George, Order car selec-	201
Steam Turbines and Their Cycles403, 751 Tool Engineers Handbook	Box, 50-ton, GAEX, General-American-Evans Company	309*	tion	288
Welding and Cutting Manual 95	Box. Union Pacific (A.C.F.)	564*		287 289
Who's Who in Railroad	Cabooses, Bay window (N.Y.C.) Gondola, Rebuilt, Composite (E.J.&E.)	194* 39*	Lee, Elijah, Outbound freight inspec-	288
Boring mill (see Machine tools) Boring, T. J., Changes in 1950 interchange	Gondola, Union Pacific (Gen. Amer.	564*	McGreevy, M. F., Coach yard inspec-	200
rules	Transp. Corp.) Increase of, A.A.R. approves Motor, Gas-electric converted to Diesel	535	Chicago Railroad Diesel Club:	290
Box, Repacking, for use in car yards 163*	Motor, Gas-electric converted to Diesel	320*	Diesel locomotive questions and an-	
Boxes, Journal: Alarm device, Twinplex (N.Y.C.) 55	Pulpwood (Magor Car Corp.)	251*	swers	410
Car, Lubricating	Pulpwood (Magor Car Corp.) Refrigerator, "Reefers" with overhead bunkers, by A. N. Campbell	374*	Fastern Car Foremen's Association:	
(A.A.R.) 430	Refrigerator-box, Unicel, Fressed		Boring, T. J., Changes in 1950 inter- change rules	282
Hot, alarm devices (Mech. Div.) 431 Hot box situation report (C.D.O.A.) 653	Steel Car Co	697* 70*	Carothers, G. E., Testing brakes on	1
Hot, Reducing, by T. W. Potter 494*	Instruction (Seaboard) Instruction (St.LS.F.)	185*	long trains Hogan, P. J., Derailments and their	102
Hot, Suggestions for eliminating, by F. K. Mitchell	Passenger: Diner, Twin-unit (A.C.FPenn.)	265*	causes	134
Hot. tests (A.T.&S.F.) 349*	"More Power to America" (G.E.)	326*	National Association of Corrosion Engi-	
Brackets for leveling boilers	Multiple-unit, Air-conditioned (N.Y.C St. Louis Car Co.)	580*	neers: Speller, F. N. and F. L. La Que, Corrosion of Diesel cylinder	
	Sleepers (Budd-Norfolk & Western).	6*	liners Northwest Carmen's Association: Morris,	258
Brake equipment, 24-RL, Troubles and remedies 646	Sleepers, Aluminum (A.C.F.) Standardization of, by Allen W.	188*	lames E., Maintenance of Vapor steam	
Brake equipment, Freight, ABLC (Air Brake	Clarke	489*	heating equipment41,	107
Assn.) 644* Brake shoes with inserts 223	Clarke Suburban, Gallery (C.B.&QBudd) "Sunset Limited" (S.PBudd) Sanding, for Diesel locomotives (B.&O.)	713* 557*	heating equipment	
Brake system leakage on freight trains (Air	Sanding, for Diesel locomotives (B.&O.)	42*	be standardized	489
Brake Assn.)	Cars, Leaky Cast iron, Carbon, Ductile Cecolloy, Cham-	151§	nating hot boxes	38
nation of moisture from (Air Brake Assn.) 647*	bersburg Engineering Co	227	Railway Supply Group: Coughlan, R. E., How railway materials are tested	330
Brakes, AB, testing on long trains, by G. E. Carothers	Caternary construction report (Elec. Sec.) . Chambersburg Engineering Co.:	623	Southeastern Railway Diesel Club: Stubbs, F. E., Road troubles on Diesel-	000
Brakes, Air:	Drop stamp "Ductile Cecolloy" carbon cast-iron	295*	Stubbs, F. E., Road troubles on Diesel- electric power	277
CF disc, Budd, Maintenance of (Air Brake Assn.) 722*	nammer control	227 609	Southwestern Railway Club: Skinner, A.	
Questions and answers, Schedule 24RL:	Zinc alloy die foundry Charger for truck batteries, Motor Generator	111	W., Design trends in Diesel shops Toronto Railway Club: Campbell, A. N.,	322
46, 101, 159, 224, 279, 356, 412, 595, 753 Brakes and brake equipment (Mech. Div.) 438	Corp	755*	"Reefers" with overhead bunkers	374
Brakes, Hand, Geared (Mech. Div.) 439	Cherry Rivet Co., Serrated shank rivets Chicago & Eastern Illinois: Personnel Diesel	167*	Coho, O. C., Rotating electric equipment for	225
Braking high-speed passenger trains (R.F.& T.E.A.) 680	club	192*	gas-turbine loco	337
Braking, Train, Automatic, Air flow in (Air Brake Assn.)	Chicago & North Western: Testing injectors, Procedure for	749*	Coils, Field, connections, Loose, Traction motor, Eliminating, by C. F. Steinbrink.	449
Brazing alloy, Air Reduction Sales Co 530 Brecht, W. A., 4,000-hp. gas turbine passen	Wheels, Locomotive, Lidgerwooding	348	Coils, Traction motor armature, Life of Communications:	348
Brecht, W. A., 4,000-hp. gas turbine passenger locomotive	Cars, Gallery suburban (Budd)	713*	Radio and communication on rolling	624
Brehoh F H. Starting requirements for loca-	Chicago, Indianapolis & Louisville: Automatic heating for small buildings Chicago Metal Hose Corp., Flexible hose	63*	stock report (Elec. Sec.)	024
motive engines 381 Brodie, Ralph, Co., Rotary fuel meter. 358* Brown, B. M., Elected chairman (A.A.R.) 426 Browning, A. C., retires 112* Brushes, Carbon, Union Carbide and Carbon	Chicago, Indianapolis & Louisville: Automatic heating for small buildings	219*	S.F.)	271
Brown, B. M., Elected chairman (A.A.R.) 426	Chicago Metal Hose Corp., Flexible hose	294*	Commutator joints, Solderless, for railway traction armatures, by J. R. Reed	202
Browning, A. C., retires	conduit	293	Commutator soldering, by Loren Jones	452
Corp	Chicago Railroad Diesel Club (see Clubs &		Commutators, Soldering, Chicago, South Shore & South Bend	83
Buchanan Electrical Products Corp., Solder- less terminal blocks	Associations) Chicago, Rock Island & Pacific:		Commutators, Traction motor, Diesel-electric,	
Budd Co.: Cars for "Sunset Limited" (S.P.) 557*	Coil connections, Field, Loose, Eliminat-	449*	Seasoning of Como-Tex Co., Electronic sound probe Conduit, Machine tool, Chicago Metal Hose	110
Cars, Sleeping (N.&W.) 6	Degreaser, Vapor, in electric shop	262*	contain, minimum tool, contains and	293
Cars, Suburban gallery (C.B.&O.) 713*	Generators, Diesel- and axle-driven Chicago, South Shore & South Bend, Solder-	342*	Connection, Shunt, for carbon brushes,	293
Bullard Co., Precision aligning level 50*	ing commutators	83*	United States Graphite Co	612
	Chicago Tool and Engineering Co., Indexing milling table	61	drill grinder	532
C	Chuck jaws, Device for grinding (N.Y.C.)	405*	Consulting Department: Commutators, Traction motor, Diesel-	
Cable, Control, Non-metallic, Rockbestos	Chute, Unloader, Car wheel (Southern) Ciliske, A. I., appointed asst. secretary A.A.R.	727*	electric, Seasoning of	28
Products Corp. 534* Cable, Heating, Electric (Cleveland Union	A.A.R. Cincinnati Grinders, Inc.:	112	Gear ratio vs. tractive force Mercury tube thermostats	343 400
Terminal) 32	Car axle grinders	226*	Solderless terminals	208
Cable report (Elec. Sec.)	Grinding machine, Gap table	598*	Containers, Bulk-material, Youngstown Steel Door Company	292
bunkers 374*	and universal milling machines	293*	Containers, Snipping, for ice engine units	
Campbell, Donald R., Gear ratio vs. tractive force	Cincinnati Shaper Co.: Shaper, Traveling	52*	Control, Expansion, Rolling tube, Airetool	738
Canadian National, Refrigerator cars with	Sheet support	609*	Manufacturing Co	52
Canadian Pacific, 2,250-hp. Diesel passenger	Circuit tracing device, Electracer, Washing-	349*	Control, Remote, for welders, Hobart Brothers	232
loco. (Electro-Motive) 27*	ton Terminal Co	145*	Control stations, Oil-Tite, Westinghouse Elec-	467
Canadian Pacific, Refrigerator cars with overhead bunkers	Brothers	415*	controls, Magnetic, for crane operation, Whit-	
Cap, Hinged, for batteries, Gould-National Batteries, Inc	Clarke, Allen W., Passenger cars must be standardized	489*	ing Corp. Convertors, Vibrator, Cornell-Dubilier Elec-	226
Car:	Cleaning and painting at coach yards		tric Corp.	111
Air conditioning equipment (Elec. Sec.) 634 and locomotive practices in transition 481§	(C.D.O.A.) Cleaning axles by flame and wire brush	657	Conveyor, Wheel, Car, Gravity (B.&O.)	37
construction, Aluminum alloy for 717*	(Despatch Shops, Inc.)	217*	Coordinated Mechanical Associations: Air Brake Association:	
Construction report (Mech. Div.) 434 Freight:	Cleaning Diesels, Procedure for (G.M.&O.) Cleaning equipment:	575*	Election of officers	
Hopper, Building, on Illinois Central Box, Welded design, Evolution of (A.W.S.) Refrigerator, Present stand Viscoused	Car washer (Southern)	106*	Reports: 24-RL brake equipment	646
Box, Welded design, Evolution of (A.W.S.)	Composition No. 45, for paint-spray booths, Oakite Products, Inc.	48	ABLC freight brake equipment	644
Refrigerator, Present status discussed	Degreasor, Vapor, Detrex Corp. (Le-		Automatic train braking Brake system leakage on freight	640
Assn.)	high)	20*	trains	643
Tank (Mech. Div.) 432*	Filter, for air conditioned coaches, R. C. Mahon Company	229*	Brakes, Budd CF disc, Maintenance	722
heating (see Heating) icing facilities, Refrigerator (D.&	Holder, Hand, for cleaning gland and	165*	Elimination of moisture from brake	647
R.G.W. 728* inspection, A. & C., results 3475	Hose, High-tensile, for steam locos., Lee		Car Department Officers Association:	
Passenger, Radiant heating 123*	Rubber & Tire Corp	230	Election of officers	651

* Illustrated article; \$ editorial; ‡ communication

5°
566*
226*
415*
109*
681
42*
278*
156*
251*
167

530* 669* 759* 736* 865* 119* 887 43* 000 771* 102\$ 556* 1556* 183

97* 168* 168

54* 45* 59*

40°

68 44*

66

Coordinated Mechanical Associations—(Contin Car Department Officers Association—(Contin		Degreesor, Vapor, Detrex Corp. (Lehigh).	20*	F	
Reports:	писи)	Degreasor, Vapor, in electric shop (C.R.I.	262*	Fairbanks Morse & Co.	
Air conditioning operation and main- tenance	652	Deionizer for battery water, Crystal Research Laboratories	166*	Fairbanks, Morse & Co.: 1,600-2,400-hp. "Consolidation" Diesels	314
Car department supervisors Car wheel shop practices	656 655	Delaney, John P., Alco-G.E. dual purpose	739*	Belt-driven generators Nozzle, Sand, Diesel	610
Cleaning and painting at coach yards	657	Delaware, Lackawanna & Western, Diesel		Falk Corp., Airflex coupling	415
Hot box situation Interchange and billing for car re-	653	shop at Scranton Denver & Rio Grande Western:	498*	Steinbrink	140
pairs Locomotive Maintenance Officers' Asso-	659	Fuel from oil shale	601	Fans, Circulating, Preco, Repairing Farr Co., Air filter washer and oiler	103°
ciation:		Icing facilities, Refrigerator car Maintenance of converter governors in	728*	Fauerbach, W. F., Seasoning of Diesel-elec-	28
Election of officers	689	Radiators, Diesel, Spray cooling	398* 525	Feedwater, Treatment of, for locomotive steam	
Load testing of Diesel engines Mechanical maintenance on Diesel	147*	Derailments and their causes, by P. J.		heat boilers (M.B.M.A.) Ferrules, Brass, for joining acetylene hoses.	164
locomotives	690	Hogan Despatch Shops, Inc.:	134	Filter, Diesel oil, Walker Manufacturing	228
Shop tools for locomotive work Steam power, Utilization of, Improv-	692*	Axle loader	394* 556*	Co. Filter elements, Fuel oil, Morrow Filter Co.	167
ing Terminal facilities for Diesel power	11* 695*	Belt, Conveyor, for removing scrap iron Cabooses, Bay Window	195*	Filter, oil, adapters, Morrow Filter Co., Inc. Filtering material, Oil, Hiltex, Hilliard	111'
Tooling for reclamation	96*	Cleaning axles by flame and wire brush Crahe hook for heavy car repairs	217* 406*	Comp	168
Training Diesel supervisors Traction motor and generator main-	689	Gantry, Simplified, for side stake welding Riveter, Squeeze, converted for shop	404*	(M.B.M.A.)	668
Master Boiler Makers' Association:	87	jobs	285*	Fireboxes, Locomotive, Oil and coal burning (M.B.M.A.) Fire-control, Permanent, for Diesel locomo- tive, American-La France-Foamite Corp.	49
Election of officers	663	Squeeze riveter for diagonal braces Detrex Corp., Vapor degreasor (Lehigh)	404*	Fire extinguisher, Carbon dioxide, American-	759
Reports: Coating the interior of boilers and		Device for applying locomotive driving springs (Wabash)	220*	La France-Foamite Corp. Fitting, Unloading, Tank car, Mead Cornell	
tenders	666	Device for protecting standing Diesels (S.P.)	570*	& Company Flame control, Wheelco Instuments Company	169
Feedwater for locomotive steam heat boilers	664	Device, Pneumatic-hydraulic, for straighten- ing center sills	164*	Flanges, Center sill, Tool for bending Flooring, Car, Plastic, Westvaco Chemical	726
Oil and coal burning locomotive fire- boxes	668	Diamonds and Tools, Inc., Blade Tips Diamonds and Tools, Inc., Tips for lathe	359*	Corp	611
Preparation of locomotive for storage	665	centers	295*	Flooring, Freight car, Armco Steel Corp Flooring, Nailable steel, for box cars, Great	530
and removal from storage Seal welding staybolts	669	Die foundry, Zinc alloy, Chambersburg Engineering Co.	111	Lakes Steel Corporation	291
Steam heat requirements on passen- ger equipment	663	Die head for valve seat rings, Landis Machine		maintenance	393
Steam space spray boiler checks	668	Diesel club, Personnel (C.&E.I.)	229* 150§	Flue reconditioning, Mechanized (Nickel Plate)	573
Programs, 1950 Railway Fuel & Traveling Engineers'	445	Diesel engines: Load testing of (L.M.O.A.)	147*	Forbes, S. Guy, Seasoning of Diesel-electric	
Assn.: Papers:		Repairing (Southern)	742*	Fortney, W. H., Instructing crews in Diesel	28
Anderson, G. E., Locomotive fuel oil	687	Starting requirements for, by F. H. Brehob	381	locomotive operation (R.F.&T.E.A.)	674 726
Anderson, G. E., Locomotive fuel oil Ballman, H. C., Co-ordination in control of railroad smoke Benton, E. D., Coal characteristics	681	Diesel hand stand, "Safe-N-Ezy", Paxton Paxton Diesel Engineering Co	167*	Frames, Truck side, weakened by corrosion. Friend, James E., appointed asst. director (I.C.C.)	
Benton, E. D., Coal characteristics		Diesels, Cleaning, Procedure for (GM.&O.)	575*	Fuel:	173
and performance of road locomo-	683	Di Liberti, E., Arc welding in railroad car shops (A.W.S.)	407*	Coal: Economy, A slump in	581
Fortney, W. H., Instructing crews in Diesel locomotive operation	674	Dodge Manufacturing Corp., Machinist vice Draft gear application (L.&N.)	531* 217*	Gas turbine	245
Glass, A. H., Education of steam en-	686	Draft gears report (Mech. Div.)	436*	Pulverized, for experimental gas tur- bine	54
Mueller, George A., Maintenance of		Drop tables, Steam and Diesel Dumper, Car, for pulpwood freight car	4618	Oil: Fuel from oil shale (D.&R.G.W.)	600
new equipment Quarles, P. A., Controlling trains	672	(Magor Car Corp.)	251*	Locomotive (R.F.&T.E.A.)	687
with dynamic brake	678			Fuel saving and water treatment (R.F.&T.	685
				E.A.)	000
Stewart, M. G., Diesel-electric yard operation	675	E		E.A.)	000
operation Tompkins, A. G., Water treatment				G.A.)	000
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed	685	Eastern Car Foremen's Association (see		G	003
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec-	685 680	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in	5918	Gannet, H. E.:	
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives	685	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in	591§ 233	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.)	153
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives	685 680	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in		Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members Gantry, Simplified, for side stake welding,	153 163
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives	685 680 673 679	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.)	233	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members Gantry, Simplified, for side stake welding, Despatch Shops, Inc Gasket for air brake flange unions, Gustin-	153 163 404
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies	685 680 673 679	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays	233 145*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company	153 163
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Con-	685 680 673 679 676 297 616	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer	233 145* 629*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members Gantry, Simplified, for side stake welding, Despatch Shops, Inc Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel	153 163 404 599 739
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Con- vertors Corrosion, Truck side frames weakened by	685 680 673 679 676 297	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment.	233 145* 629* 757*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members Gantry, Simplified, for side stake welding, Despatch Shops, Inc Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears)	153 163 404 599
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dublier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive perform-	685 680 673 679 676 297 616 111*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment.	233 145* 629* 757* 108* 33\$ 631	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric	153 163 404 599 739
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars. Reducing	685 680 673 679 676 297 616 111* 726*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment.	233 145* 629* 757* 108* 33§	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.:	153 163 404 599 739 343 168
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Branking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical	685 680 673 679 676 297 616 111* 726*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical associations expansion problems Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.) Rotating, for gas-turbine loco. by O. C.	233 145* 629* 757* 108* 33§ 631 516* 528*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company. Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars	153 163 404 599 739 343
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are	685 680 673 679 676 297 616 111* 726* 462\$ 491	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical associations expansion problems Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.)	233 145* 629* 757* 108* 33§ 631 516*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.)	153 163 404 599 739 343 168 298
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.)	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 436*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical associations expansion problems Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company	233 145* 629* 757* 108* 33\$ 631 516* 528*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.:	153 163 404 599 739 343 168 298 309
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costa: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp.	685 680 673 679 676 297 616 111* 726* 462§ 491 610 330* 436* 415*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical associations expansion problems Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R.	233 145* 629* 757* 108* 33§ 631 516* 528* 337* 622	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.)	153 163 404 599 343 168 298 309 564
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Con- vertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive perform- ance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Hose Co., Inc.	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 436*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical associations expansion problems Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern:	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company. Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp., General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment	153 163 404 599 739 343 168 298 309 564 739 507 465
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Con- vertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive perform- ance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Hose Co., Inc.	685 680 673 679 676 297 616 111* 726* 462§ 491 610 330* 436* 415*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical associations expansion problems Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern:	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company. Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp., General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment	153 163 404 599 739 343 168 298 309 564 739 507
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Co., Chemlon molded packing material	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 436* 415* 533* 748*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical associations expansion problems Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating	233 145* 629* 757* 108* 33§ 631 516* 528* 337* 622 110* 333*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric Diesel-electric switching locomotive,	153 163 404 599 739 343 168 298 309 564 739 507 465
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Branking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Co., Chemion molded packing material Crane Packing Company, Lapping machine.	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 415* 533* 748*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for	233 145* 629* 757* 108* 33§ 631 516* 528* 337* 622 110* 333* 39* 220* 42*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive, Control	153 163 404 599 739 343 168 298 309 564 739 507 465 32 23 76
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Co., Chemion molded packing material Crane Packing Company, Lapping machine Cranes, Hoist-type, Whiting Corporation. Cranes, Hoist-type, Whiting Corporation.	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 415* 533* 748* 169 111* 468* 463\$	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Pany Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles	233 145* 629* 757* 108* 33§ 631 516* 528* 337* 622 110* 333*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive, Control	153 163 404 599 739 343 168 298 309 564 739 507 465 32 23 76
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Company, Lapping machine. Crane, Hoist-type, Whiting Corporation Crankcase explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories. Deionizer for	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 436* 415* 533* 748* 169 111* 468* 463\$ 594	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Pany Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles	233 145* 629* 757* 108* 33§ 631 516* 528* 337* 622 110* 333* 39* 220* 42*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive, Control	153 163 404 599 343 168 298 309 564 739 567 465 32 23 76 172 23 172 231
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Company, Lapping machine. Crane, Hoist-type, Whiting Corporation Crankcase explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories. Deionizer for	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 415* 533* 748* 169 111* 468* 463\$	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve	233 145* 629* 757* 108* 33§ 631 516* 528* 337* 622 110* 333* 39* 220* 42* 37* 72*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive, Control	153 163 404 599 343 168 298 309 564 739 507 465 32 23 766 172 23 1326 597
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Con- vertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive perform- ance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity in- creased (G.M.&O.) Crane Packing Company, Lapping machine Crane, Hoist-type, Whiting Corporation Crankcase explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-elec- tric generator units	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 436* 415* 533* 748* 169 111* 468* 463\$ 594	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp.	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 220* 42* 37*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force. Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. toad switcher Battery-charging equipment Cable, Heating, Electric. Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive tests Lamp for bare-bulb fixtures Lamps, Fluorescent, DR phosphoir. "More Power to America" train Motor, Single-phase, SCR Motors, Canacitor, Single-phase.	153 163 404 599 343 168 298 309 564 739 507 465 32 23 76 172 531 326 597 227
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Company, Lapping machine Cranes, Hoist-type, Whiting Corporation Crankcase explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crossheads, Aluminum, Retinning Crossheads, Aluminum, Retinning Crossheads, Aluminum, Inc., Diesel-elec- Cummins Engine Company, Inc., Diesel-elec-	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 436* 415* 533* 748* 169 1111* 169 1111* 169 1111* 169 169 169 169 169 169 169 169	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Pany Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp. Equipment supply Equitable Life Assurance Society, Freight Cars	233 145* 629* 757* 108* 33§ 631 516* 528* 337* 622 110* 333* 39* 220* 42* 37* 72*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric Diesel-electric switching locomotive, 25-ton Gas turbine-electric locomotive, Control system for (A.I.E.E.) Gas-turbine-electric locomotive tests Lamp for bare-bulb fixtures Lamps, Fluorescent, DR phosphoir "More Power to America" train Motor, Single-phase, SCR Motors, Capacitor, Single-phase Oil-resistant wire	153 163 404 599 343 168 298 309 564 739 465 32 23 76 172 231 326 597 227 77 27 77 77 77
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Branking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Co., Chemion moided packing material Crane Packing Company, Lapping machine Cranes, Hoist-type, Whiting Corporation. Crankcase explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Cummins Engine Co., Inc., Fuel injection pump Cylinder liners: They don't wear out, they	685 680 673 679 676 297 616 111* 726* 462§ 491 610 330* 415* 533* 748* 169 111* 468* 463* 594 166* 599* 700*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp. Equipment supply Equitable Life Assurance Society, Freight cars	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 42* 37* 72* 52 275\$	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric Diesel-electric switching locomotive, 25-ton Gas turbine-electric locomotive, Control system for (A.I.E.E.) Gas-turbine-electric locomotive tests Lamp for bare-bulb fixtures Lamps, Fluorescent, DR phosphoir "More Power to America" train Motor, Single-phase, SCR Motors, Capacitor, Single-phase Oil-resistant wire	153 163 404 599 739 343 168 298 309 564 739 507 465 32 23 76 172 23 1326 697 772 277 772 277 772 277 772 292
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Cougling, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Company, Lapping machine Cranes, Hoist-type, Whiting Corporation Crankcase explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Cummins Engine Company, Inc., Diesel-electric generator units	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 415* 533* 748* 169 111* 468\$ 594 166* 599* 700*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp. Equipment supply Equitable Life Assurance Society, Freight cars Erie: Bearing puller and ram for Diesel	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 42* 37* 72* 52 275\$ 296	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force. Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. toad switcher Battery-charging equipment Cable, Heating, Electric. Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive, Control system for (A.I.E.E.) Gas-turbine-electric locomotive tests Lamp, Fluorescent, DR phosphoir. "More Power to America" train Motor, Single-phase, SCR Motors, Capacitor, Single-phase. Oil-resistant wire Questions and answers, Diesel-electric. 593 Spotlight, Long range. Spotlight, Reflector Wattmeter, Hookon	153 163 404 599 739 343 168 298 309 564 739 507 465 32 23 172 231 231 231 231 231 231 231 231 231 23
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Branking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Co., Chemion moided packing material Crane Packing Company, Lapping machine Cranes, Hoist-type, Whiting Corporation. Crankcase explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Cummins Engine Co., Inc., Fuel injection pump Cylinder liners: They don't wear out, they	685 680 673 679 676 297 616 111* 726* 462§ 491 610 330* 436* 415* 533* 748* 169 111* 468§ 594 166* 599* 700*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp. Equipment supply Equitable Life Assurance Society, Freight cars Erie: Bearing puller and ram for Diesel locomotive Diesel facilities Sealed-beam headlights for Diesel	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 39* 220* 42* 37* 72* 52 275\$ 296	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher. Battery-charging equipment Cable, Heating, Electric. Diesel-electric switching locomotive, 25-ton Gas turbine-electric locomotive tests. Lamp for bare-bulb fixtures. Lamps, Fluorescent, DR phosphoir. "More Power to America" train. Motors, Capacitor, Single-phase. Oil-resistant wire Questions and answers, Diesel-electric. 593 Spotlight, Long range. Syootight, Reflector Wattmeter, Hook-on Welders, A.C., Skilicone-insulated Welders, A.C., C.E., Engine-driven.	153 163 404 599 739 343 168 298 309 564 739 507 465 32 23 76 172 23 1326 697 772 277 772 277 772 277 772 292
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-elec- tric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Con- vertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive perform- ance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Tuloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity in- creased (G.M.&O.) Crane Packing Company, Lapping machine Cranes, Hoist-type, Whiting Corporation Crankcase explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-elec- tric generator units	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 415* 533* 748* 169 111* 468\$ 594 166* 599* 700*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp. Equipment supply Equitable Life Assurance Society, Freight cars Erie: Bearing puller and ram for Diesel locomotive Diesel facilities Sealed-beam headlights for Diesel	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 220* 42* 37* 72* 52 275\$ 296	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive, Control system for (A.I.E.E.) Gas-turbine-electric locomotive tests Lamp for bare-bulb fixtures Lamps, Fluorescent, DR phosphoir "More Power to America" train Motor, Single-phase, Oil-resistant wire Questions and answers, Diesel-electric 593 Spotlight, Long range Spotlight, Long range Spotlight, Effector Wattmeter, Hook-on Welder, A.c., Silicone-insulated Welders, Arc, D.C., Engine-driven General Steel Castings Corp., Commonwealth B-X car truck	153 163 404 599 739 343 168 298 309 564 739 507 76 172 231 326 6172 231 326 597 772 277 772 772 772 772 772 772 772 7
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Cougling, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Company, Lapping machine Cranes, Hoist-type, Whiting Corporation Crankcase explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Cummins Engine Company, Inc., Diesel-electric generator units	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 415* 533* 748* 169 111* 468\$ 594 166* 599* 700*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Eigin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Filot Corp. Equipment supply Equitable Life Assurance Society, Freight cars Erie: Bearing puller and ram for Diesel locomotive Diesel facilities Sealed-beam headlights for Diesel Skids, Battery-handling Tester, Stroboscopic speedometer Expenses, Operating: Times Do Changel	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 39* 220* 42* 37* 72* 52 275\$ 296 43* 600 43* 600 207* 22138* 94\$	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin-Bacon Manufacturing Company. Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force. Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric. Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive, Control system for (A.I.E.E.) Gas-turbine-electric locomotive tests. Lamp for bare-bulb fixtures. Lamps, Fluorescent, DR phosphoir. "More Power to America" train. Motor, Single-phase, SCR Motors, Capacitor, Single-phase. Oil-resistant wire Questions and answers, Diesel-electric. 593 Spotlight, Reflector Wattmeter, Hookon Welder, A.C., Silicone-insulated Welders, Arc, D.C., Engine-driven. General Steel Castings Corp., Commonwealth B-X car truck Generator units, Diesel-electric, Cummins	153 163 404 599 739 343 168 298 309 564 739 465 32 23 76 172 227 772 772 772 772 772 110 292 531 131 131 131 131 131 131 131 131 131
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.). Crane Packing Co., Chemion molded packing material Cranes, Hoist-type, Whiting Corporation Cranes, Hoist-type, Whiting Corporati	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 415* 533* 748* 169 111* 468\$ 594 166* 599* 700*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec. Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp. Equipment supply Equitable Life Assurance Society, Freight cars Erie: Bearing puller and ram for Diesel locomotive Diesel facilities Sealed-beam headlights for Diesel Skids, Battery-handling Tester, Stroboscopic speedometer Expenses, Operating: Times Do Change! Explosions, Crankcase, Diesel, Preventing.	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 220* 42* 37* 72* 52 275\$ 296 43* 600 207* 22* 138*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric. Diesel-electric switching locomotive, 25-ton Gas turbine-electric locomotive tests. Lamp for bare-bulb fixtures. Lamps, Fluorescent, DR phosphoir. "More Power to America" train. Motor, Single-phase, Oil-resistant wire Ouestions and answers, Diesel-electric. 593 Spotlight, Long range. Syootlight, Long range. Syootlight, Long range. Syootlight, Ac, Silicone-insulated Welders, A.C., D.C., Engine-driven General Steel Castings Corp., Commonwealth B-X car truck Generator units, Diesel-electric, Cummins Engine Company, Inc. Generators:	153 163 404 599 739 343 168 298 309 564 739 567 465 32 23 766 172 231 326 597 772 227 772 2168 699 599
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Co., Chemion molded packing material Crane Packing Company, Lapping machine Cranes, Hoist-type, Whiting Corporation Crankease explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 415* 533* 748* 169 111* 468* 463\$ 594 166* 599* 700* 211\$ 258*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp. Equipment supply Equitable Life Assurance Society, Freight cars Erie: Bearing puller and ram for Diesel locomotive Diesel facilities Sealed-beam headlights for Diesel Skids, Battery-handling Tester, Stroboscopic speedometer Expenses, Operating: Times Do Change! Explosions, Crankcase, Diesel, Preventing Extinguishers, Fire: Carbon dioxide, American-LaFrance-	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 220* 42* 37* 72* 52 275\$ 296 43* 600 207* 22* 138* 463*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin-Bacon Manufacturing Company. Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force. Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars. GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. toad switcher. Battery-charging equipment Cable, Heating, Electric. Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive, Control system for (A.I.E.E.) Gas-turbine-electric locomotive tests. Lamp for bare-bulb fixtures. Lamps, Fluorescent, DR phosphoir. "More Power to America" train. Motor, Capacitor, Single-phase. Oil-resistant wire Ouestions and answers, Diesel-electric. 593 Spotlight, Reflector Wattmeter, Hook-on Welder, A.C., Silicone-insulated Welders, Arc, D.C., Engine-driven. General Steel Castings Corp., Commonwealth B-X car truck General Steel Castings Corp., Commonwealth B-X car truck Generators: Belt-driven, Fairbanks, Morse & Co Diesel card all Allows.	153 163 404 599 739 343 168 298 309 564 739 507 465 32 23 172 531 1326 5597 7772 227 7772 216 533 533 533 533 533 533 533 533 533 53
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Co., Chemion molded packing material Crane Packing Company, Lapping machine. Cranes, Hoist-type, Whiting Corporation. Crankease explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Cammins Engine Company, Inc., Die	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 436* 415* 533* 748* 169* 116* 599* 700* 211\$ 258*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec. Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp. Equipment supply Equitable Life Assurance Society, Freight cars Erie: Bearing puller and ram for Diesel locomotive Diesel facilities Sealed-beam headlights for Diesel Skids, Battery-handling Tester, Stroboscopic speedometer Expenses, Operating: Times Do Change! Explosions, Crankcase, Diesel, Preventing Extinguishers, Fire: Carbon dioxide, American-LaFrance-	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 39* 220* 42* 37* 72* 52 275\$ 296 43* 600 43* 600 207* 22138* 94\$	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin-Bacon Manufacturing Company. Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force. Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars. GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. toad switcher. Battery-charging equipment Cable, Heating, Electric. Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive, Control system for (A.I.E.E.) Gas-turbine-electric locomotive tests. Lamp for bare-bulb fixtures. Lamps, Fluorescent, DR phosphoir. "More Power to America" train. Motor, Capacitor, Single-phase. Oil-resistant wire Ouestions and answers, Diesel-electric. 593 Spotlight, Reflector Wattmeter, Hook-on Welder, A.C., Silicone-insulated Welders, Arc, D.C., Engine-driven. General Steel Castings Corp., Commonwealth B-X car truck General Steel Castings Corp., Commonwealth B-X car truck Generators: Belt-driven, Fairbanks, Morse & Co Diesel card all Allows.	153 163 404 599 739 343 168 298 309 564 739 507 465 32 23 172 531 1326 5597 7772 227 7772 216 533 533 533 533 533 533 533 533 533 53
operation Tompkins, A. G., Water treatment and fuel saving Webb, R. G., Braking high-speed passenger trains Williamson, R. A., Gas-turbine-electric locomotives Reports: Abuse of Diesel locomotives Handling freight trains with Diesel locomotives Smith, T. Duff, dies Registration Cornell-Dubilier Electric Corp., Vibrator Convertors Corrosion, Truck side frames weakened by Costs: Maintenance vs. locomotive performance Costs: Passenger cars, Reducing C-O Two Fire Equipment Co., Dry chemical fire extinguisher Coughlan, R. E., How railway materials are tested Couplers report (Mech. Div.) Coupling, Flexible, Non-lubricated, Falk Corp. Coupling, Unloading, Tank car, Atlantic Metal Hose Co., Inc. Crane, Jib, Radius and loading capacity increased (G.M.&O.) Crane Packing Co., Chemion molded packing material Crane Packing Company, Lapping machine Cranes, Hoist-type, Whiting Corporation Crankease explosions, Diesel, Preventing Crossheads, Aluminum, Retinning Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units Crystal Research Laboratories, Deionizer for battery water Cummins Engine Company, Inc., Diesel-electric generator units	685 680 673 679 676 297 616 111* 726* 462\$ 491 610 330* 415* 533* 748* 169 111* 468* 463\$ 594 166* 599* 700* 211\$ 258*	Eastern Car Foremen's Association (see Clubs & Associations) Economy, Coal, A slump in Edison Electric Institute, Railroad electrification research program Electracer, Circuit tracing device, Washington Terminal Co. Electric heating (Elec. Sec.) Electric Storage Battery Co., Paint for battery trays Electric Tachometer Corp., Electric tachometer Electrical equipment: Car report (Elec Sec.) Cleaning, by D. E. Stafford Installing in Diesel shop (St. LS.F.). Rotating, for gas-turbine loco., by O. C. Coho Electrolysis report (Elec. Sec.) Electronic sound probe, Compo-Tex Company Electroplating of wearing parts, by T. R. Boggess Elgin, Joliet & Eastern: Cars, Gondola, Composite, Rebuilt Platform, Side, for Diesel repairs Reservoir, Air, Device for facilitating removal of Straightening lever arrangement for freight car bentup top angles Engine performance, Automatic instruments test, by J. Albin Engine recorder, Switching locomotive, Valve Pilot Corp. Equipment supply Equitable Life Assurance Society, Freight cars Erie: Bearing puller and ram for Diesel locomotive Diesel facilities Sealed-beam headlights for Diesel Skids, Battery-handling Tester, Stroboscopic speedometer Expenses, Operating: Times Do Change! Explosions, Crankcase, Diesel, Preventing Extinguishers, Fire: Carbon dioxide, American-LaFrance-	233 145* 629* 757* 108* 33\$ 631 516* 528* 337* 622 110* 333* 220* 42* 37* 72* 52 275\$ 296 43* 600 207* 22* 138* 94\$ 463*	Gannet, H. E.: Welding aluminum and cast iron parts (A.W.S.) Welding stainless steel car members. Gantry, Simplified, for side stake welding, Despatch Shops, Inc. Gasket for air brake flange unions, Gustin- Bacon Manufacturing Company Gauss, Joseph H., Alco-G.E. dual purpose Diesel Gear ratio vs. tractive force Gears, Draft (see Draft gears) Gearturbines, Type E, Westinghouse Electric Corp. General American-Evans Co.: Box cars GAEX 50-ton box cars General American Transportation Corp., Gondola cars (U.P.) General Electric Co.: 1,600-hp. dual purpose road freight Diesel (Alco.) 1,600-hp. road switcher Battery-charging equipment Cable, Heating, Electric Diesel-electric switching locomotive, 25-ton Gas turbine electric locomotive tests Lamps, Fluorescent, DR phosphoir. "More Power to America" train Motor, Single-phase, SCR Motors, Capacitor, Single-phase Oil-resistant wire Questions and answers, Diesel-electric. 593 Spotlight, Reflector Wattmeter, Hook-on Welders, Arc., Silicone-insulated Welders, Arc., D.C., Engine-driven, General Steel Castings Corp., Commonwealth B-X car truck Generators: Belt-driven, Fairbanks, Morse & Co	153 163 404 599 739 343 168 298 309 564 739 507 465 32 23 172 531 1326 5597 7772 227 7772 216 533 533 533 533 533 533 533 533 533 53

Giddings & Lewis Machine Tool Co., Car		Hook, Crane, for neavy car repairs, Despatch		Lighting:	
wheel boring tool	712*	Shops, Inc. Hooks for holding chuck jaws	406* 572*	Enginehouse, Fluorescent (N.Y.C.) Headlight, Sealed beam, by H. H. Helm-	198*
(N.Y.C.)	269*	Horn, Air, Chime-tone, Leslie Co	414*	bright	732*
crews	686	Cleaning, Locomotive, Lee Rubber &	460	Lighting equipment: Floorlight, Suspension device for,	
Gould-National Batteries, Inc., Hinged cap	758*	Tire Corp. Cleaning (see Cleaning equipment)	468	Thompson Electric Company Lamps:	533*
Government: Interstate Commerce Commission:		Flexible, Corrosion resistant, Chicago Metal Hose Co.	294	Bare-bulb fixtures, General Electric	531*
Diesel brake rule revisal Bureau of Locomotive Inspection:	701	Huck Manufacturing Co., Heavy duty blind	208*	Fluorescent, DR phosphor (G.E.) Luminaries, Fluorescent, Westing-	231* 414*
Friend, James E., appointed assis-	173	rivets Hunt-Spiller Manufacturing Corp., Three-	169*	house Electric Corp Trouble, Flex Lite, Aero-Motive Man-	
Bureau of Safety, Annual report,	7525	piece piston ring Hydrometer and thermometer maintenance	61* 86*	ufacturing Co. Mounts, Weatherproof, for sealed-	52*
Bureau of Service. Bad-order reports,	234			Headlights, sealed beam (Erie)	758 * 207 *
Freight Car	360	I		Spotlight, Long range, General Elec- tric Co.	.110*
Labor Statistics, Report on equipment	601		36*	Spotlight, Reflector (G.E.) Lima Electric Co., Type R3C gearshift	292*
Governors, Converter, Maintenance of, in radio service, by J. G. Weber.	398*	Ice plant for refrigerator cars (K.C.S.) Icing facilities, Car, Refrigerator (D.&		drive	359*
Grand Trunk Western, Portable Scaffold, for		R.G.W.) Illinois Central:	728*	Lima-Hamilton Corp.: 2,500-hp. switcher (Pennsylvania)	371*
rip track work	727*	Air brake parts lifter Building hopper cars at Centralia	216* 161*	Snow plows, RotaryLincoln Electric Co.:	131*
(A.W.S.) Gravenstuk, George, Order car selection	66* 288	Containers, Shipping, for Waukesha ice engine units	738*	Electrode holder Fleetwelder arc welder	414* 532*
Great Lakes Steel Corporation, Nailable steel flooring	291*	Jig for train line welding	107* 622	Hidden arc welding	613*
Great Northern Paper Co., Pulpwood freight	251*	Indicators: Strain, Battery-powered, Baldwin Loco-		Loader, Axle (Despatch Shops, Inc) Loading, Lumber, report (Mech. Div.)	349* 444
Grille controls, Barber-Colman Company	467	motive Works	415*	Loading rules (see Rules, Loading)	
Grinder, Car parts, with traveling work table (N.Y.C.)	352*	Tin content, for solder, Wheelco Instru- ments Co.	611*		428
Grinders, Car axle, Cincinnati Grinders,	226*	Wheel-slide, and control, King, Spring Packing Corp.	48*	Diesel: Heating equipment for de-icing (Scheu	
Grinders (see Machine tools) Gulf, Mobile & Ohio:	2488	Industrial Products Co., Extension cord	772*	Products Co., Ltd.) Maintenance, Mechanical (L.M.O.A.)	197* 690
A. & C. car inspection results Cleaning Diesels, Procedure for	347§ 575*	Injector testing procedure (C.&N.W.) Inspection, Car, A. & C., results	749* 347§	The one-hoss shay	276
Crane, Jib, Radius and loading capacity	748*	Insulating materials report (Elec. Sec.) Interchange rules (see Rules, Interchange)	618	Questions and answers (Alco- G.E.)	752
Gustin-Bacon Manufacturing Company, Gasket for air brake flanged unions	599*	Intercoolers for air compressors, Wilson Engi-	108*	Questions and answers (Chicago Rail- road Diesel Club)	, 54
IVI all blane images among		neering Corp. Irvington Varnish & Insulator Co., Insulating varnish	531	47, 160, 225, 280, 354 Road troubles, by F. E. Stubbs	410
н		Tutalisti	331	Gas-turbine:	277
		T		Coal burning at Dunkirk, by J. I. Yellott	245
Haas Ice and Cold Storage Co., Icing for refrigerator cars	36*	•		Control system for (A.I.E.E.) 76*, Tested at Dunkirk	938
Haddad, L. B., A.c. motor-alternator power for passenger cars	24*	Jig, Calibration, for torque wrenches (A.T& S.F.)	572*	Steam, Utilization, Improving, N. & W. (L.M.O.A.)	11'
Hammer control, Chambersburg Engineering	609	Jigs for connecting rods (B&O.) Jones & Lamson Machine Co., Turret lathe	278*	Locomotive and car practices in transition.	4815
Co. Hangers, Lowering, Unit packages for Hartmann, E. C., Aluminum alloy in car	467*	accessory	294* 453*	George M. Davies:	
construction Hauser, G. B., Aluminum alloy in car	717*	Jones, Loren, Commutator soldering	733	Alloys, Aluminum, Use of	411 101
construction	717*	K		Axles cracked in journals Bearing, Capacity of	594 100
Headlighting, Sealed beam, by H. H. Helm- bright	732*			Brake shoes with inserts	223 223
Heat exchanger, Tube bundle, Young Radiator Co.	293*	Kansas City Southern, Icing plant for refrig-	36*	Crossheads, Aluminum, Retinning Curtains, Cam, Two-piece Freight locomotives converted to oil,	594 595
Heat, Steam, requirements on passenger equipment (M.B.M.A.)	663	erator cars Kearney & Trecker Corp, Knee type milling	756*	Freight locomotives converted to oil,	
Heaters: Cab, Locomotive, Kysor Heater Company		Machine Kelly, R. E., Seasoning of Diesel-electric		Safety requirements for	223 594
Coolant, for Diesel locomotive, Anchor Post Products, Inc.		Kennametal, Inc., LRT roll-turner	30 166*	Lubricators, Driving box Netting, Front end Nozzles, Exhaust	595 411
not-water, for Diesel engines, vapor		Kerr, Charles, Jr., 4,000-hp. gas turbine	1*	Nozzles, Exhaust Numbers, Locomotives, Duplicate Recorder, Speed, location	595 594
Induction, and mechanical puller (S.P.)	392*	Ring Machine Tool Div., American Steel Foundries, Vertical boring mill	108*	Recorder, Speed, location	223 100
Automatic, for bending beams	218*	Kutlik, John, C.C.I. Bureau inspection Kysor Heater Company, Locomotive cab	289	Screw thread, Type of Springs, Locomotive, Working load of Steel, Carbon, What is	100 594
Automatic, for small buildings (Monon) Car, Passenger, Radiant	123*	heater	291*	Threads, Screw Tolerances, Shrinking	411
Car, Passenger (Vapor Htg. Corp Pullman-Stand.)	60*			Locomotives:	333
Electric (Elec. Sec.)	629*	L		Diesel-electric: 1,600-hp. road switcher (Alco-G.E.)	507
Boilers, Waste heat, for gas-turbine	5*	Ladle, Melting, Unique Mfg. Co	.295*	1,600-2,400-hp., "Consolidation," Fair- banks-Morse	314
Cable, Electric, Cleveland Union Ter- minal (Gen. Elec.) for de-icing Diesels (Scheu Products	32	Lamps (see Lighting equipment) Landis Machine Co., Automatic nipple		banks-Morse 2,500-hp. switcher (PennLima-Hamilton)	371
for de-icing Diesels (Scheu Products	197*	threading machine Landis Machine Co., Die head for valve	758*	Hamilton) 4,500-hp. "More Power to America" (G.E.)	326*
Steam, Vapor, Maintenance of (North-		seat rings Landis Tool Co., Cylindrical grinding ma-	229*	Abuse of (R.F.&T.E.A.) Road freight, Dual purpose, 1,600-hp.	679
Helmbright, H. H. Sealed beam head-	100	chines	534*	(Also-G.E.) Standard line (Baldwin-Westinghouse)	739° 566°
Hewing, H. L., Car inspectors work at Chi-	732*	Lapping machine (see Machine tools) LaQue, F. L., Corrosion of Diesel cylinder	0000	Gas-turbine:	
cago Terminals	287	Lathe accessory, Turret, Jones & Lamson	258*	Electric (R.F.&T.E.A.) Passenger, 4,000-hp. (Westinghouse)	673
Hibbard, L. J., Rectifier type motive power (A.I.E.E.) Hilliard Corp., Hiltex oil-filtering material.	141* 168	Machine Co. Lathe center tips, Diamonds and Tools, Inc.	294* 295*	Tests (Alco-G.E.) Locomotives, Diesel-electric, Statistics of	172
Hobart Brothers Co.: A.c. transformer welders	612*	Layne-Held Corp., In-R-Tool workholding		units in service (M.B.M.A.)	379 665
Remote control for welders	232*	tool LeBlond, R. K.:	357*	Locomotives, Preparation of, for storage Locomotives, Road, Coal characteristics of	303
Hogan, P. J., Derailments—and their causes Hoist, Electric, Chain-type, Yale & Towne	227*	20-in. hollow-spindle lathe	166* 532*	Locomotives, Road, Coal characteristics of (R.F.&T.E.A.)	683
Mfg. Co. Hoists, Electric chain, Whiting Corporation Holder, Blueprint, by W. E. Abbott.	466* 207*	Heavy-duty engine lathe. Lathe, Automatic, Highspeed	51* 229*	(R.F.&T.E.A.) Locomotives, Steam, Storing for emergency. Louisville & Nashville:	2108
Holder, Electrode, Insulated, Lincoln Elec-	4145	Lathe, Engine, Heavy-duty. Lee, Elijah, Outbound freight inspection.	288	Draft gear application	217*
Holder, Electrode, Insulated, Lincoln Elec- tric Co. Holder, Hand, for cleaning glands and	414*	Lee Rubber & Tire Corp., Republic Rubber Div., Hose for cleaning steam locos	230	Lubrication; Car and locomotive (Mech.	
couplings Holder, Stencil, for metal signs, by W. E.	103	Lehigh Valley, Vapor degreaser (Deterex	20*	Div.) Lubrication processes, Dry, Impregnated,	430
Abbott Holes, Boiler, Tolerances for reaming	222* 100	Leslie Co., Chime-tone air horn Level, Aligning, Precision, Bullard Co.	414* 50*	Pyrene Manufacturing Co Lubricators, Driving box	598* 595
Holland Co., A-7-A snubber spring. Hood, Respirator, American Optical Co.	414° 759°	Leveling device. Car wheel sets (N.Y.C.)	556*	Lumber loading (Mech. Div.) Lundy, E. A., Company, Diesel locomotive	444
Hook and hammer, Combination (Nickie		Lever arrangement, Straightening, for freight- car bent-up top angles (E.J.&E.) Light stand, Portable, by W. E Abbott	37° 525°	water cooler	597°
Plate)	4.70	* Illustrated article; \$ editorial; ‡ communic		Description Co., Scarring without	,
		and article, a cultorial; 4 communic	MUUII		

14* 10* 62* 15* 40* 28* 64* 57* 11* 68* 69* 69* 10*

1*

3* 8 4 6*

1 § 5 *

3* 3* 4* 9*

8*

M		Motors—(Continued) Single-phase capacitor (General Elec-		Personnel: Apprentices, Technical, Hiring and train-	
		tric)	227*	ing (N.Y.C.)	358
Machine, Assembly, Hose line, Aeroquip Corp.	611*	Single-phase, SCR, General Electric Co. Mat-O-Trol adjustable-speed drive for small	597*	Diesel locomotive crews, Instructing	192*
Machine tools: Boring mill, Diesel wheel, King Machine		motors, Westinghouse Electric Corp. Mounts, Weatherproof, Sealed-beam lamps, Magni-Lite, Inc. Muncie Gear, Works, Inc. Portable sine	51*	(R.F.&T.E.A.) Inspectors, Car, Work of (Car Foremen's	674
Tool Division Boring mill, Vertical, King Machine Tool	467*		758*	Shop organization, Diesel (D.L.&W.)	286 499*
Div. Grinders:	108*	threader Munger, H. P., Dr., Air-pollution research	294*	(RF&TFA)	686
Cylindrical, Landis Tool Co. Drill, Bench type, Consolidated Ma-	534*	director Mutual Engineering Service Co., Safety	172	(C.D.O.A.)	656
chine Tool Corp. Gap table, Cincinnati Grinders, Inc.	533* 598*	shield for welding work	756*	Supervisors, Diesel, Training (L.M. O.A.)	689
Lapping machine, Self-conditioning, Crane Packing Co	111*	*		Pilot, Locomotive, One-piece (S.P.) Pinion heater, Induction, National Electric	221*
Automatic, High Speed, R. K. LeBlond Machine Tool Co.	***	N		Coil Co. Pipe threader, Portable, Muncie Gear Works,	109*
Engine, Heavy-duty, R. K. LeBlond	51*	Nathan Manufacturing Co., Airchime whistle	413*	Inc. Pipe threaders, Revolving die-head, Oster	294*
Machine Tool Co		National Association of Corrosion Engineers (see Clubs & Associations)		Manufacturing Company Piston rings, Three-piece, Hunt-Spiller Manu-	359*
Hollow-spindle, 20-in. R. K. LeBlond	230*	National Carbon Co., Inc., Graphite wheel flange lubricating rods	111.	facturing Corp. Platform, Side, for Diesel repairs (E.J.&E.)	61* 220*
Machine Tool Co	166*	heater National Exposition of Power and Mechanical	109*	Pliers, Industrial, J. H. Williams & Co Plows, Snow:	292
Knee-type, Model CK, Kearney & Corp	756*	Engineer, Program	469	Rotary, Diesel power for (C.B.& Q.) Rotary, Lima-Hamilton Corp Potter, T. W., Some ways to reduce hot boxes	131*
Plain and universal, 3MI, Cincinnati Milling Machine Co.	293*	program New York Central:	760	Potter, T. W., Some ways to reduce hot boxes Power pipe machine, Wheel cut-off, Toledo Pipe Threading Machine Co	494
Punch, Multiple, Air activated, Beatty Machine & Mig. Co.	51* 52*	Apprentices, Technical, Methods of hir- ing and training (A.S.M.E.)	16	Power plants, Gas turbine, 2,000-hp. (West-	700*
Shaper, Traveling, Cincinnati Shaper Co. Threading machine, Automatic nipple,	758*	Batteries, Handling of, with pallets	16 269*	inghouse)	2*
Landis Machine Co	/36	Cabooses, Bay window	351* 194*	A.c. motor-alternator, for passenger cars, by L. B. Haddad	24*
shop (D.L.&W.)	500*	Device for grinding chuck jaws Device for leveling carwheel sets	405* 556*	Electric, Rotating, for gas-turbine loco.,	337*
Machine tools for Diesel loco. parts reclama- tion (L.M.O.A.)	96*	Grinder, Car parts, with traveling work		by O. C. Coho	326*
Machine tools, New, Savings derived from Magnaflux Corporation, Axles-cleaning ma-	2115	Instructing crews in Diesel locomotive	352*	Radio, Train (A.T.&S.F.)	271*
chine Magnetizer for wheel inspection (S.P.)	466* 273*	operation (R.F.&T.E.A.) Lighting, Enginehouse, Fluorescent	674 198*	E.E.)	150 618
Magni-Lite, Inc., Weatherproof mounts for		Meter, Ampere-hour (for crane truck	451*	Press for shortening drawbars (B.&O.)	156*
sealed-beam lamps Magnus Chemical Co., Free production test	758*	Multiple-unit cars, Air-conditioned (St. Louis Car Co.)	589*	Press, Pneumatic, for draft gear repairs	104*
cleaning service Magor Car Corporation, Pulpwood freight car	51* 251*	Wheel shop at Beech Grove	353* 482*	(A.T.&S.F.) Pressed Steel Car Company, New car type tests	298
Mahon, R. C., Company, Filter cleaning equipment for air conditioned coaches	229*	New York, Chicago & St. Louis: Flue reconditioning, Mechanized		Pressed Steel Car Company, Unicel refrig-	697*
Manning, Maxwell & Moore, Inc., Hydraulic-		Hook and hammer, combination	406* 352*	Prices for labor and materials (Mech. Div.)	442
Marker, Wire, for high temperatures, West-	596*	Riveter, Squeeze Nickel Cadmium Battery Corp., Nickel cad-	759*	Prudential Insurance Company of America, GAEX-DF cars	535
ern Lithograph Co. Materials, Railway, Testing, by R. E. Cough-	756*	mium battery Norfolk & Western:		Puller, Wheel bearing, and ram for Diesel locomotives (Erie)	43*
McGreevy, M. F., Coach yard inspection	330° 290	Cars, Sleeping (Budd)	6*	Pulling equipment, Hydraulic, Simplex-Jenny, Templeton, Kenly and Co	231*
Mead Cornell & Company, Tank car unload- ing fitting	169*	Skid for handling air pumps	333*	Car heating system	60*
Mechanical officers, Future Mechanics Engineering Company, Bar-Lok	35§	Steam motive power utilization, Improv- ing (L.M.O.A.)	11*	Pump, Fuel injection, Cummins Engine Co., Inc.	700*
work-holding units Merrill Brothers, Adjusta-Clamp lifting clamp	357* 415*	Northern Pacific, Gas-electric motor car, converted to Diesel	320*	Punch (see Machine Tools) Putz, T. J., 4,000-hp. gas turbine passenger	
Meters: Ampere-hour, for crane truck	451*	Northwest Carmen's Assn. (see Clubs & Associations)		Pyrne Manufacturing Co., Electrofilm Graph-	1*
Fuel, Rotary, Ralph N. Brodie Co Rotary, High-speed, Bowser, Inc	358* 468*	Nozzle, Sand, Diesel, Fairbanks, Morse & Co. Nozzle, Spray, Steam generator, Vapor Heating Corp.	62*	ite dry lubrication processes	598*
Midwest Power Conference, Gas Turbine at Dunkirk, by John I. Yellott	245*	Heating Corp generator, vapor	227*	. 0	
Mileage: Should it be stretched out? Milling machine (see Machine Tools)	4018			Quarles. P. A., Controlling trains with	
Milling table, Indexing, Chicago Tool and En-	61	0		Quarles, P. A., Controlling trains with dynamic brake (R.F.&T.E.A.)	678
gineering Co. Miner, W. H., Inc., Truck spring snubber. Minnesota Mining and Manufacturing Co.,	294*	Oakite Products, Inc., Cleaning material for		R	
Insulating tape	51*	paint-spray booths, Composition No. 45 Oatley, H. B., honored	48 469		
Attracting and holding engineering graduates (A.S.M.E.)	6. 358	Oatley, H. B., honored Oatley, H. B., receives degree Oiler unit, Air filter, Farr Co.	234* 757*	Rack for holding boring bars	573* 748*
Suggestions for eliminating hot boxes	38	Oster Manufacturing Company, Die-head pipe threaders	359*	Radiators, Diesel, Spray cooling of (D.&R. G.W.)	525
Monorail materials-handling system, Trambeam, Whiting Corp	358*	Oxweld Railroad Service Co., Metal and ar- gon are welder	598*	Radio Frequency Laboratories, Inc., Insulating tester	50*
struction	717*		0.0	Rail, Hand, Safety, Diesel locomotive Railway Supply Group (see Clubs & Asso-	43*
Morris, James E., Maintenance of Vapor steam heating equipment	41	P		ciations) Recorders:	
Morrow Filter Co., Fuel oil filter elements Morrow Filter Co., Oil filter adapters	167			Engine, Switching locomotive, Valve Pilot Corp.	52
Motive power: It's almost never as bad as it looks	4625	Pacific Railway Club (see Clubs & Associa- tions)		for switch locomotives, Barco Manufac- turing Co.	597*
Motive power, Steam, Utilization of, Improv- ing (L.M.O.A.)	11*	Packing material, Molded, Chemlon, Crane Packing Co.	169	Light, Photoelectric, Western Electrical Instrument Corp.	534*
Motor-alternator, MG-19, A.c., for passenger cars	24*	Paget, R. R., Mercury tube thermostats	400	Strain, Strip-chart, Daigwin Locomotive	
Motor Generator Corp., Charger for truck batteries	755*	for battery trays, Electric Storage Bat- tery Co.	757*	Works Reed, J. R., Solderless Commutator joints for railway traction armatures (A.I.E.E.)	226*
Motor, Traction, Axle-mounted: If sufficiently robust	7508	Oil base, United Laboratories, Inc. Primer, Metal, Moisture-proof, Thomson-	549	Reel. Extension cord. Industrial Products Co.	202°
Motors:	15.00	Porcelite Paint Co. Transformer, Westinghouse Electric Co.	52	Research program, Railroad Electrification. Reservoir, Air, Device for facilitating removal of (E.J.&E.)	233
and controls (Elec. Sec.) D.C., Type K, Life-Line, Westinghouse	110*	Painting metallic surfaces, Swedish firm demonstrates	54	Resistor, Battery field, for hump-yard opera- tion (T.&P.)	42*
Elec. Corp. Gearshift drive, Type R3C, Lima Elec- tric Co.		Pallets for battery handling (N.Y.C.) Parts, Wearing, Electroplating of, by T. R.	269*	Riveter, Squeeze:	519*
Traction: and generator maintenance (L.M.		Boggess (N.&W.) Paxton Diesel Engineering Co., Diesel valve	333*	converted for shop jobs, Despatch Shops, Inc.	285*
O.A.)	37, 935	spring depressor Paxton Diesel Engineering Co., Safe-N-	110*	for diagonal braces, Despatch Shops, Inc (Nickel Plate)	404° 352°
C. F. Steinbrink	85*	Ezy Diesel head stand Pennsylvania Railroad:	167*	Rivets: Blind, Heavy-duty, Huck Manufacturing	1000
C. F. Steinbrink	.526* 5928	2,500-hp. switcher (Lima-Hamilton) Diner, Twin-unit (A.C.F.)	371*	Boiler, Aluminum, Shearing strangth of	169° 46
Maintenance (Florida East Coast)	393	Rectifier motive power equipment tests		Serrated shank, Cherry Rivet Co Rockbestos Products Corp., Control Cable Roddick Tool Company, Pipe wrenches	167° 534°
Maintenance practices (A.T.&S. F.)		Pennsylvania Salt Mfg. Co., Powdered cleaner Peronto, Fred, appointed secretary, A.A.R.	108	Rods, Lubricating, Graphite wheel nange,	
mining, sociatio, mid Equipment Corp.	200	* Illustrated article: 8 editorial: * communic	112-	National Carbon Co., Inc50*	, 111
		" Illustrated article: 5 aditorial: 4	49		

Rolling stock, Automotive and electric (Elec. Sec.)	637*	Shop Kinks—(Continued) Locomotive—(Continued)		Testing equipment: Automatic instrument, for engine per-	
Rolling stock, Radio and communication on (Elec. Sec.)	624	Vat, Lye and rinsing platform for Diesel parts (B.&O.)	157*	formance, by Joseph Albin	72* 757*
Roll-turner LRT, Kennametal Inc.	166*	Shop, Wheel, New York Central, at Beech Grove	482*	Insulating, Radio Frequency Labora- tories, Inc.	50*
Rules of Interchange: 1950, Changes in (Eastern Car Fore-	202	Shops, Car: Repair, Design for small shop, by J. C.	102	Insulation, James G. Biddle Co.	597*
men's Assn.) and billing for car repairs (C.D.O.A.)	659	Allenhurst Wheel, Tool engineering (A.C.F.)	510 551*	Resistance, James G. Biddle Co Speedometer, Stroboscopic, Erie	468* 138*
Changes in 1950 interchange rules, by T. J. Boring Rules, Loading, Report (Mech. Div.)	213	Shops, Diesel: Design for small shop, by J. C. Allen-	331	Testing machine. Universal hydraulic,	109*
Rust prevention, Side sheet, method	443 218	hurst	510*	Baldwin Locomotive Works Testing injectors, Procedure for (C.&N.W.)	749*
		Design trends (Southwestern Ry. Club)	322* 538*	Testing procedures for railway materials, by R. E. Coughlan	330*
		Electrical equipment, Installing (St.LRepair, Statistics on	88	Tests: Cavitation-eronsion, Diesel cylinder liners Diesel engines, by F. H. Brehob	260
S		Scranton (D.L.&W.) Shops, Motors and controls and (Elec. Sec.)	498* 624*	Gas turbine, Coal-burning	248
Safety appliances (Mech. Div.)	443	Skid for handling air pumps (N.&W.) Skids, Battery-handling (Erie)	44* 22*	Gas-turbine-electric loco. (Also-G.E.) Gas-turbine, Experimental, at Dunkirk	172 54*
Safety Car Heating and Lighting Co., MG-19	24*	Skinner, A. W., Design trends in Diesel	322*	Hot box (A.T.&S.F.) Load testing Diesel engines	349* 147*
motor alternator St. Louis Car Company, Multiple-unit cars	580*	Sleeve polisher, AB piston Smith, A. O., Corp., 400-amp. a.c. welder	165* 700*	Rectifier motive power equipment (A.I. E.E.)	141*
(N.Y.C.) St. Louis-San Francisco:	300	Smith, R. M., Locomotive wheel-slip and wheel lock protection	454*	Wheel controller (American Brake Shoe Co.) Texas & Pacific, Battery field resistor	577*
Electrical equipment, Installing, in Diesel	528* 185*	Smith, T. Duff, dies Smoke, Coordination in control of (R.F.&	297	Texas Co., Motor-driven grease tester	519* 757*
Instruction car Springfield yard and Diesel shops		Smoke, Coordination in control of (R.F.& T.E.A.) Snap-On Tools Corp.:	681	Thermometer and hydrometer maintenance. Thermostats, Mercury tube	86* 400
Scaffold, Portable, for rip truck work (Grand Trunk Western)	727*	Angle-head wrenches	358* 598	Thompson Electric Company, Suspension de- vice for floodlights	533*
Trunk Western)	197*	Stud Pullers Snubber, Spring, Truck, W. H. Miner, Inc. Sockets, Screw, J. H. Williams & Co.	612* 294*	for lowering hangers	467*
Seaboard Air Line, Instruction car	70*	Sockets, Screw, J. H. Williams & Co Soldering, Commutator, by Loren Jones	531* 452*	Thomson-Porcelite Paint Co., Led-Chroxide metal primer paint	52
3, Air Reduction Sales Co	61*	Solderless terminals, Railroad application of Sound probe, Electronic, Como-Tex Company	208*	Thread, Screw, Steam locomotive, Types of Threaders, Pipe, Portable, Muncie Gear	101
Sheet and plate, Aluminum, Nomenclature approved	536	Southern Pacific: Cars for "Sunset Limited" (Budd)	557*	Works,, Inc	294*
Sheet support, Cincinnati Shaper Co Shield, Safety, Spa-Fla, for welding work,	609*	Device for protecting standing Diesels Heater, Induction, and mechanical puller	570*	Tips for lathe centers, Diamonds and Tools,	295*
Mutual Engineering Service Co	756*	Magnetizer for wheel inspection	273*	Toledo Pipe Threading Machine Co., Power pipe machine	700*
Shop Kinks: Car:		Southern Railway:		Tolerances for punching staybolt holes	158
Axle loader, Despatch Shops, Inc. Axles, Cleaning, by flame and wire		Axles, Roller bearings, Diesel, Finishing Chute, Unloader, Car wheel	727*	Tompkins, A. G., Water treatment and fuel saving	685
Bench for cleaning cylinders	217*	Diesel engines, Repairing Southwestern Railway Club (see Clubs and	742*	Tooling the man as well as the shop	750§
(N V C)	351*	Associations) Spray cooling Diesel radiators (D.&R.G.W.)		for bending center sill flanges	726* 164*
Chuck jaws, Device for grinding (N.Y.C.) Chute, Unloader, Car wheel (Southern) Conveyor belt for removing scrap	405*	Specifications for materials (Mech. Div.) Specialists: Should they govern or advise? Speed drive, Adjustable, Mot-O-Trol, for	442 402§	Hand, for solderless terminals, Aircraft- Marine Products, Inc.	530*
(Southern)	727*	small motors, Westinghouse Electric Corp. Speller, F. N., Corrosion of Diesel cylinder	51*	Shop, for locomotive work (L.M.O.A.) Wheel boring, Car, Giddings & Lewis	221* 692*
iron, Despatch Shops, Inc.	556* 37*	liners	258*	Wheel boring, Car, Giddings & Lewis Machine Tool Co. Wheel shop (A.C.F.)	712"
iron, Despatch Shops, Inc. Conveyor, Wheel, Gravity (B.&O.) Device for leveling wheel sets (N.Y.C.)	556*	Spring depressor, Passenger car (N.Y.C.) Spring Packing Corp., King wheel-slide indi-	353*	Workholding, In-R-Tool, Layne-Held	551*
Floor boards Warned Device for	21/	Spring, Snubber, A-7-A, Holland Company Spring snubber, Truck, W. H. Miner, Inc.	48*	Corp	357*
straightening (Wabash)	40*	Spring snubber, Truck, W. H. Miner, Inc. Springs, Steam locomotive, Working load of	294* 100	ciations) Totams, F. A.:	
welding, Despatch Shops, Inc.	404*	Spot light (see Lighting equipment) Spotlight, Long range, General Electric Co.		Gear ratio vs. tractive force Traction motor maintenance in a small	344*
Grinder with traveling work table (N.Y.C.) Hook and hammer, Combination	352*	Stafford, D. E., Cleaning electrical equip- ment	516*	Shop	393*
(Nickle Plate)	. 400	Stamp, Drop, Chambersburg Engineering Co. Stand, Break-in, for air compressors	295*	Traction motors (see Motors, Traction) Trains, Controlling, with dynamic brake	
Hook, Crane, for heavy repairs Despatch Shops, Inc.	. 406*	Stand, Diesel head, Paxton Diesel Engineering Co.		(DESTEA)	679
Jig for train line welding (I.C.)		Standard Railway Equipment Manufacturing Company, Wheel-truing machine		Trains, Freight, Handling, with Diesel loco- motives (R.F.&T.E.A.) Trains: "More Power to America," General	676
Riveter, Squeeze, converted for sho jobs (Despatch Shops, Inc.)	. 285*	Stands, Repair, Up-Right Scaffolds Starter, Motor, Westinghouse Electric Corp	230*	Electric Transformers, Type MR, Westinghouse Elec-	326
Riveter, Squeeze, for diagonal braces Despatch Shops, Inc.	404*	Statistics, Diesel-electric locomotives Staybolts, Seal welding (M.B.M.A.)	379 669	tric Corp	358*
Despatch Shops, Inc	. 352* k	Steinbrink, C. F.: Eliminating loose field coil connections.		tives by	347
(Grand Trunk Western) Spring depressor, Passenger ca (N.Y.C.)	. 121-	Reenforcing motor fan blades Removing traction motor armature wedge	. 140*	Sec.) Truck test report, Freight (A.A.R.)	623
Straightening lever arrangement to)T	Seasoning of Diesel-electric traction moto	r	Trucks, Car:	
bent-up top angles (E.J.&E.) Tool for draft key retainer lock	S	commutators Taking the mystery out of armatur	e :	Box, GAEX, 50-ton, General American- Evans Co. Commonwealth B-X, General Steel Cast	310°
Washer for freight car interior	. 104*	Traction motor failure corrected Vapor degreaser in the electric shop	. 85*	ings Corp. Trucks, Locomotive:	699
(Southern)		Stewart M. G. Diesel-electric yard opera	-	Diesels, "Consolidation," Fairbanks,	318*
Axles, Roller bearing, Diesel, Fit ishing (Southern)	. 748*	tion (R.F.&T.E.A.) Stroboscopic speedometer tester, Erie	. 138*	Morse Gas turbine, 4,000-hp. (Westinghouse)	
Bearing puller and ram, Whee Diesel (Erie)	. 70	Stubbs, F. E., Road troubles on Diesel-electri	. 277	Turbine, Gas, Coal-burning, by John I	
Bearings, Motor, Diesel, Reclaim		Stud pullers, Snap-on Tools Corp	. 612*	Yellott Turbines, Gear, Type E, Westinghouse Elec	
Boiler compound storage box, b	44*	T		Turner, Roll, LRT, Kennametal Inc	. 168°
Car, Sanding, for Diesel (B&O.) Crane, Jib, Increasing loading capa	C-	LIPS - CONTRACT OF THE PARTY OF			
Device for applying driving spring	748°	ning, Maxwell & Moore, Inc	. 596*	U	12.
(Wabash) Device for protecting standing Diesels (S.P.)	220°	Tachometer, Electric, Electric Tachometer	1004		, 1
Diesels (S.P.) Injector testing procedure (C.&N.W.	., , ,,,	Tape, Electrical, Bishop Manufacturin	g	Union Carbide and Carbon Corp., Nationa Carbon Div.:	
Jib, Calibration, for torque wrench	es 572	Tape, Insulating, Minnesota Mining an Manufacturing Co.	. 51	Battery, Flashlight Brushes, Carbon	. 331
Pilot, One-piece (S.P.) Platform, Side, for Diesel repai	221	Templeton, Kenly and Company, Simplet Jenny pulling equipment	x-	Union Pacific, Gondola and box cars (A.C.F	. 564
Pilot, One-piece (S.P.)	220	Terminal blocks, Solderless, Buchanan Ele	c- . 357	Unique Mfg. Co., Melting ladle	. 295
Rail, Safety hand, for Diesel loc	- 43	Terminal facilities for Diesel power	er 695	Retrigerator Car Committee: Present statu	18
Reservoir, Air, Device for facilitating removal of (E.J.&E.)	ng 42	Test cleaning service, Free production Magnus Chemical Co		of refrigerator car discussed	170
Skid for handling air pum (N.&W.) Skids, Battery-handling (Erie)	ps 44	Test report, Truck, Freight (A.A.R.) Testing brakes on long trains, by G	. 173	United States Rubber Co., High slip upho	1- 612
Skids, Battery-handling (Erie)	22	Carothers	102	stering material	. 772
		* Illustrated article; \$ editorial; ‡ commu	nication		

* *

1

Units, Work-holding, Bar-Lok, Mechanics	2574	Welding:		and the test Con Cittings & Louis	
Upholstering material, High slip, United	357*	Aluminum and cast iron parts, by H. E. Gannet	153*	Wheel boring tool, Car, Giddings & Lewis Machine Tool Co	712
States Rubber Co	772	and cutting (Elec. Sec.)	631	Wheel, car, unloader chute (Southern)	727
Up-Right Scaffolds, Repair stands	230*	Arc, Hidden, Lincoln Electric Company.	613* 407*	Wheel controller, Diesel (American Brake Shoe Co.)	577
Utilization, Locomotive (see Locomotive, Utilization)		Arc, in railroad car shops (A.W.S.) Boiler sheet cracks, Throat	45	Wheel sets, Car, Leveling edvice for (N.Y.C.)	556
,		Box car, Evolution of design (A.W.S.)	66*	Wheel shop practices, Car (C.D.O.A.)	655
		Car members, Stainless steel (A.W.S.) Seal, in fireboxes	163* 100	Wheelco Instruments Co.: Flame control	169
V		Seal, staybolts (M.B.M.A.)	669	Tin content indicator for solder	611
		Stays, Boiler, on fire side	412	Wheel-slide indicator and control, King,	40
Valve Pilot Corp., Switching locomotive en-	52	Welding equipment: Aircomatic, for metallic are welding, Air		Spring Packing Corp. Wheel-truing machine, Standard Railway	48
Valve spring depressor, Diesel, Paxton Diesel		Reduction Sales Co	109	Equipment Manufacturing Company	464
Engineering Co	110*	Control, Resistant welding, Westinghouse		Wheels:	
Vapor Heating Corporation: Car heating system	60*	Electric Corp. Holder, Electrode, Insulated, Lincoln	228*	Locomotive, Steam, Lidgerwooding, Advantages of (C.&N.W.)	34
Heater, Hot-water, for Diesel engines	755*	Electric Co. Indicator, Tin content, for solder, Wheelco	414*	Locomotive: Wheel-slip and wheel lock	
	227*	Indicator, Tin content, for solder, Wheelco Instruments Co	611*	report (Mech. Div.)	440
Steam heating equipment, Maintenance of Varnish, Insulating, Irvington Varnish &	41	Jig for train line welding (I.C.)	107*	Whistle, Airchime, Nathan Manufacturing	****
Insulator Co	531	Remote control for welders. Hobart		Co	413
Vat, Lye, and rinsing platform for cleaning	157*	Brothers Co. Safety shield, Spa-Fla, Mutual Engineering Service Co.	232*	Whiting Corp.: Cranes, Hoist-type	468
Vaughan, K. A., How to charge storage bat-			756*	Electric chain hoists	466
teries	736* 274§	Welder, 200-amp., Engine-driven, Air Reduction Sales Co.	221*	Magnetic controls for crane operation.	226 358
Ventilation, Engine compartment	2/48	Welder, 400-amp, a.c., A. O. Smith	231*	Whittaker, C. C., Rectifier type motive power	330
Corp	111*	Corp. Welder, A.c., Silicone-insulated, General Electric Company	700*	(A.I.E.É.)	141
Vise, Machinist, Dodge Manufacturing Corp.	531*	Welder, A.c., Silicone-insulated, General	432*	Williams, J. H., & Co., Industrial pliers	292 531
		Welder, Arc, Fleetwelder, Lincoln Elec-	432	Williamson, R. A., Gas-turbine-electric loco-	331
117		tric Co	532	tives (R.F.&T.E.A.)	673
, vv		Welder, Arc, Metal and argon, Oxweld Railroad Service Co	598*	Magnetic controls for crane operation. Monorall system Whittaker, C. C., Rectifier type motive power (A.I.E.E.) Williams, J. H., & Co., Industrial pliers. Williams, J. H., & Co., Screw sockets. Williamson, R. A., Gas-turbine-electric locotives (R.F.&T.E.A.) Wilson Engineering Corp., Intercoolers for air compressors	108
Wabash: Devices for applying locomotive		Welders, Arc, D.c., Engine-driven, Gen-		Wire, Oil-resistant, General Electric Co	772
driving springs Wabash: Floor boards, Warped, Device for	220*	eral Electric Co	168*	Wire report (Elec, Sec.)	618 598
Wabash: Floor boards, Warped, Device for straightening	40*	Welders, Transformers, A.c., Hobart Brothers Company	612*	Wrenches:	370
Walker Manufacturing Co., Diesel oil filter Warrick, T. J., Control system for gas tur-	228*	Western Electrical Instrument Corp., Light		Angle-head, Snap-on Tools Corp	.358
Warrick, T. J., Control system for gas tur-	7/4	Western Litherman Co. Wine marker for	534*	Pipe, Roddick Tool Company Seat-ring, for valve maintenance, Lunken-	599
Washer unit. Air filter, Farr Co.	76* 757*	Western Lithograph Co., Wire marker for high temperatures	756*	heimer Co	167
Washington Terminal Co., "Electracer," Cir-		Westinghouse Electric Corp.:	, 50	heimer Co. Wright, Charles W., elected president of A.R.C.I.	
Water cooler, Diesel locomotive, E. A. Lundy	145*	4.000-hp. gas turbine passenger locomo-	14	Wright, Samuel L. Felton, resigns	702
Company, Inc.	597*	Adjustable speed-drive, Mot-O-Trol, for	1*	Trigui, Daniaci Zi Zcitoli, lediglia	102
Water treatment and fuel saving (R.F.&		small motors	51*		
	685 533*	Control stations, Oil-tite	228* 467*	Y	
Webb, R. G., Braking high-speed passenger	303	Diesel-electric locomotive, Standard line	566*	Yale & Towne Mfg. Co., Chain type electric	
trains	680	Diesel-electric locomotive, Standard line Gearturbines, Type E Luminaries, Fluorescent, Industrial	168*	hoist	227
Weber, John G., Maintenance of converter governors in radio service	398*	Motor starter	414*	Yard operation, Diesel-electric (R.F.&T.E.A.)	675
Weight, Car: How much per pounds 5	5928	Motor starter Paint, Transformer	759*	Yellott, John I., Gas turbine at Dunkirk Young Radiator Co., Tube bundle heat ex-	245
Weights, Car: Aluminum alloy for car con-		Transformers, Type MR	359*	change and the care of the care care	293
	717#	Type K De motors		changer	273
Welders (see Welding equipment)	717*	Type K, D.c. motors	110*	Youngstown Steel Door Company, Bulk-	-
	717*	Type K, D.c. motors	110*	Youngstown Steel Door Company, Bulk- material containers	292
	717*	Type K, D.c. motors	110*	Youngstown Steel Door Company, Bulk-	-
	717*	Type K, D.c. motors	110*	Youngstown Steel Door Company, Bulk-	-
Welders (see Welding equipment)	717*	Type K, D.c. motors Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608.	110* 611*	Youngstown Steel Door Company, Bulk- material containers	292
	717*	Type K, D.c. motors Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland	292
Welders (see Welding equipment) Personal Mention		Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland	292 122 120 770
Personal Mention Abbey, L. E		Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423	Gooch, Roland	122 120 770 422
Personal Mention Abbey, L. E	768 423 771	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland	292 122 120 770
Personal Mention Abbey, L. E	768 423 771 709	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. Cook, E. L. Coon, D. J. Cooper, L. H.	771 423 771 710 606 58 547	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Goray, James Halbert, C.	122 120 770 422 243
Personal Mention Abbey, L. E	768 423 771	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769*	Gooch, Roland Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F.	122 120 770 422 243 244 122
Personal Mention Abbey, L. E	768 423 771 709 370	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769* 370	Gooch, Roland Gorder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A.	122 120 770 422 243 244 122 58 423
Personal Mention Abbey, L. E	768 423 771 709	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769*	Gooch, Roland Gorder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A.	122 120 770 422 243 244 122 58 423 767
Personal Mention Abbey, L. E	768 423 771 709 370	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. 600,	771 423 771 771 710 606 587 769* 370 423	Gooch, Roland Gorder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A.	122 120 770 422 243 244 122 58 423 767 305
Personal Mention Abbey, L. E	768 423 771 709 370	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. 600,	771 423 771 771 710 606 587 769* 370 423	Gooch, Roland Gorder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A.	122 120 770 422 243 244 122 58 423 767 305 708
Personal Mention Abbey, L. E	768 423 771 709 370	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. 600,	771 423 771 771 710 606 587 769* 370 423	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Harbell, William F.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. 600,	771 423 771 771 710 606 587 769* 370 423	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. Coon, D. J. 600, E. L. 600, E. 600,	771 423 771 771 710 606 587 769* 370 423	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. Cook, E. L. Coon, D. J. Cooper, L. H. Courtney, Harry Cox, William C. 710, Crane, H. L. Creighton, L. H. Dadd, W. F. Daniel, S. G. Davis, C. W. Davis, C. W. Davis, W. S. DeVilbiss, Edwin B. Dew, W. V. Dixon, L. A. Dobbs. William R.	771 423 771 771 710 606 587 769* 370 423	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 7709 370 244 243 307 422 181 59 244 424 424 769 424	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. Cook, E. L. Coon, D. J. Cooper, L. H. Courtney, Harry Cox, William C. 710, Crane, H. L. Creighton, L. H. Dadd, W. F. Daniel, S. G. Davis, C. W. Davis, C. W. Davis, W. S. DeVilbiss, Edwin B. Dew, W. V. Dixon, L. A. Dobbs. William R.	771 423 771 7710 606 58 547 3769* 370 423 710 243 710 243 771 770 9	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 243 769 244 243 769 183	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. Cochran, Oliver Cone, Earl C. Cook, E. L. Coon, D. J. Cooper, L. H. Courtney, Harry Cox, William C. 710, Crane, H. L. Creighton, L. H. Dadd, W. F. Daniel, S. G. Davis, C. W. Davis, W. S. DeVilbiss, Edwin B. Dew, W. V. Dixon, L. A. Dobbs, William B. Dockstader, C. M. Dorsey O. M.	771 423 771 710 606 58 547 183 769* 370 423 423 423 423 421 480 771 7709 548 709	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 244 422 181 59 244 424 243 769 424 183 122 370	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. Cochran, Oliver Cone, Earl C. Cook, E. L. Coon, D. J. Cooper, L. H. Courtney, Harry Cox, William C. 710, Crane, H. L. Creighton, L. H. Dadd, W. F. Daniel, S. G. Davis, C. W. Davis, W. S. DeVilbiss, Edwin B. Dew, W. V. Dixon, L. A. Dobbs, William B. Dockstader, C. M. Dorsey O. M.	110* 611* 771 423 771 710 606 58 547 183 769 423 710 423 710 423 710 423 710 701 709 608	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 243 769 244 243 769 183	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769* 370 423 423 423 423 421 480 771 7709 548 709	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 181 59 244 424 2769 424 3769 424 377 480	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	110* 611* 771 423 771 710 606 58 769* 370 423 710 423 710 423 710 423 710 608 707 707 707	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 244 243 769 244 243 370 480 307	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 423 769* 370 423 423 710 243 710 243 710 709 548 307 707	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 243 370 424 243 370 424 370 480 307 122 710	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 7423 769 423 710 243 710 243 710 243 710 243 710 243 710 307 707 710 307	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 7709 370 244 243 307 480 244 183 122 243 769 424 183 122 710 709	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	110* 611* 771 423 771 710 606 58 547 183 769 423 710 423 710 423 710 423 710 423 710 701 709	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 777 779 370 244 243 307 422 181 59 244 424 243 769 484 183 307 122 370 480 710 710 710 7548 376	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769* 370 423 423 423 423 709 608 307 707 710 307	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Hardbur, G. Hart, L. Harding, George M. Hart, L. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E.	292 122 120 770 422 243 244 122 58 423 767 305 708 59 711
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 243 769 4183 122 710 243 370 243 370 244 370 307	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	110* 611* 771 423 771 710 606 58 547 183 769* 423 710 423 710 423 710 423 710 709 608 307 707 709 708	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. Hynes, M. L. Hypes, M. L.	122 120 120 120 244 122 243 244 122 243 305 708 329 711 709 423 369 480 768 243 769 480 768 243 769 768 768 768 768 768 768 768 768 768 768
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 243 769 424 183 307 424 183 307 102 709 548 376 305 188**	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769 423 710 243 711 709 608 609 608 771 709 708 423 424	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. Hynes, M. L. Hypes, M. L.	122 120 120 120 244 122 243 244 122 243 305 708 329 711 709 423 369 480 768 243 769 480 768 243 769 768 768 768 768 768 768 768 768 768 768
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 243 307 424 243 307 122 370 480 307 122 370 709 183* 548 376 183*	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769 423 710 243 711 709 608 609 608 771 709 708 423 424	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. Hynes, M. L. Hypes, M. L.	122 120 120 120 244 122 243 244 122 243 305 708 329 711 709 423 369 480 768 243 769 480 768 243 769 768 768 768 768 768 768 768 768 768 768
Personal Mention Abbey, L. E	768 423 7709 370 244 243 307 181 59 244 424 183 122 433 769 480 307 480 307 709 548 376 305 183* 548	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769 423 710 243 711 709 608 609 608 771 709 708 423 424	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. Hynes, M. L. Hypes, M. L.	122 120 120 120 244 122 243 244 122 243 305 708 329 711 709 423 369 480 768 243 769 480 768 243 769 768 768 768 768 768 768 768 768 768 768
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769 423 710 243 711 709 608 609 608 771 709 708 423 424	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. Hynes, M. L. Hypes, M. L.	122 120 120 120 244 122 243 244 122 243 305 708 329 711 709 423 369 480 768 243 769 480 768 243 769 768 768 768 768 768 768 768 768 768 768
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769 423 710 243 711 709 608 609 608 771 709 708 423 424	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hawthorne, J. W. Hempstead, R. C. Heron, J. H. Hick, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. L. Hynes, M. L. Hypes, H. D. Jennings, W. M. Johnson, W. B. Johnson, W. B. Johnson, W. I., Jr. Jones, Frederick P.	292 1222 1200 422 244 423 588 423 767 305 59 711 709 369 480 858 868 243 769 480 608 242 437 769 480 608 769 769 480 608 769 769 769 769 769 769 769 769 769 769
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	771 423 771 710 606 58 547 183 769 423 710 243 711 709 608 609 608 771 709 708 423 424	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hawthorne, J. W. Hempstead, R. C. Heron, J. H. Hick, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. L. Hynes, M. L. Hypes, H. D. Jennings, W. M. Johnson, W. B. Johnson, W. B. Johnson, W. I., Jr. Jones, Frederick P.	292 1222 1200 422 244 423 588 423 767 305 59 711 709 369 480 858 868 243 769 480 608 242 437 769 480 608 769 769 480 608 769 769 769 769 769 769 769 769 769 769
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	110* 611* 771 423 771 710 606 58 547 183 769 423 710 423 710 423 710 423 710 423 710 423 710 701 701 701 701 702 702 703 707 708 709 708	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hawthorne, J. W. Hempstead, R. C. Heron, J. H. Hick, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. L. Hynes, M. L. Hypes, H. D. Jennings, W. M. Johnson, W. B. Johnson, W. B. Johnson, W. I., Jr. Jones, Frederick P.	292 1222 1200 422 244 423 588 423 767 305 59 711 709 369 480 858 868 243 769 480 608 242 437 769 480 608 769 769 480 608 769 769 769 769 769 769 769 769 769 769
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. 600, Cook, E. L. 600, Cooper, L. H. 600, Courtney, Harry 600, Crane, H. L. 600, Crane, H. C. 600, Crane, M. C. 600, Crane,	110* 611* 771 423 771 710 606 58 547 183 769 423 710 423 710 423 710 423 710 423 710 709 708 423 424 242 243 771 708 768	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hawthorne, J. W. Hempstead, R. C. Heron, J. H. Hick, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. L. Hynes, M. L. Hypes, H. D. Jennings, W. M. Johnson, W. B. Johnson, W. B. Johnson, W. I., Jr. Jones, Frederick P.	292 1222 1200 422 243 423 588 423 767 305 59 711 771 771 768 370 608 243 376 606 242 423 423 424 424 427 427 428 429 429 429 429 429 429 429 429 429 429
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. 600, Cook, E. L. 600, Cooper, L. H. 600, Courtney, Harry 600, Crane, H. L. 600, Crane, H. C. 600, Crane, M. C. 600, Crane,	110* 611* 771 423 771 710 606 58 547 183 769 423 710 423 710 423 710 423 710 423 710 709 708 423 424 242 243 771 708 768	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hawthorne, J. W. Hempstead, R. C. Heron, J. H. Hick, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. L. Hynes, M. L. Hypes, H. D. Jennings, W. M. Johnson, W. B. Johnson, W. B. Johnson, W. I., Jr. Jones, Frederick P.	292 1222 1200 422 243 423 588 423 767 305 59 711 771 771 768 370 608 243 376 606 242 423 423 424 424 427 427 428 429 429 429 429 429 429 429 429 429 429
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	110* 611* 771 423 771 710 606 58 547 183 769* 3423 710 423 710 423 710 423 710 307 708 423 424 242 243 771 708 608 307 7707 708 423 424 242 243 771 708 608	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hawthorne, J. W. Hempstead, R. C. Heron, J. H. Hick, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. L. Hynes, M. L. Hypes, H. D. Jennings, W. M. Johnson, W. B. Johnson, W. B. Johnson, W. I., Jr. Jones, Frederick P.	292 1222 1200 422 243 423 588 423 767 305 59 711 771 771 768 370 608 243 376 606 242 423 423 424 424 427 427 428 429 429 429 429 429 429 429 429 429 429
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	110* 611* 771 423 771 710 606 58 547 183 769* 3423 710 423 710 423 710 423 710 307 708 423 424 242 243 771 708 608 307 7707 708 423 424 242 243 771 708 608	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, William E. Hatchell, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. Hynes, M. L. Hypes, M. L.	292 1222 1200 422 243 423 588 423 767 305 59 711 771 771 768 370 608 243 376 606 242 423 423 424 424 427 427 428 429 429 429 429 429 429 429 429 429 429
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	110* 611* 771 423 771 710 606 58 547 183 769* 3423 710 423 710 423 710 423 710 307 708 423 424 242 243 771 708 608 307 7707 708 423 424 242 243 771 708 608	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hawthorne, J. W. Hempstead, R. C. Heron, J. H. Hick, John M. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. L. Hynes, M. L. Hypes, H. D. Kasmeier, J. H. Jones, Frederick P. Kasmeier, J. H. Kine, W. F. Kuhn, E. A. Kuffess, L. S.	2922 1220 1220 1220 2443 1222 243 4213 767 3055 708 709 3699 4800 588 2433 7699 4800 4800 4800 768 2424 3767 4800 4800 7697 4900 7697 4900 7600 7600 7600 7600 7600 7600 7600 7
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L	110* 611* 771 423 771 710 606 58 547 183 769* 3423 710 423 710 423 710 423 710 307 708 423 424 242 243 771 708 608 307 7707 708 423 424 242 243 771 708 608	Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hawthorne, J. W. Hempstead, R. C. Heron, J. H. Hick, John M. Higgins, C. C. Hill, J. O. Hitte, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. L. Hynes, M. L. Hypes, H. D. Jennings, W. M. Johnson, W. B. Johnson, W. B. Johnson, W. B. Johnson, W. B. Jones, Frederick P. Kasmeier, J. H. Kerwin, J. E. Kuhn, E. A. Kurfess, L. S.	292 122 120 770 422 243 423 769 122 182 548 58 769 122 132 608 769 424 306 608 769 424 317 424 427 427 427 427 427 427 427 427 42
Personal Mention Abbey, L. E	768 423 771 709 370 244 243 307 422 181 59 244 424 3769 428 3769 428 370 243 370 243 370 243 370 243 370 243 370 243 370 2710 709 548 376 305 183** 548 5770	Type K, D.c. motors. Westvaco Chemical Corp., Plastic car flooring Christian, John L. 608, Close, L. B. 608, Close, L. B. 608, Cochran, Oliver Cone, Earl C. 600, Cook, E. L. 600, Cooper, L. H. 600, Courtney, Harry 600, Crane, H. L. 600, Crane, H. C. 600, Crane, M. C. 600, Crane,	110* 611* 771 423 771 710 606 58 547 183 769* 3423 710 423 710 423 710 423 710 307 708 423 424 242 243 771 708 608 307 7707 708 423 424 242 243 771 708 608	Youngstown Steel Door Company, Bulk- material containers Gooch, Roland Gonder, Douglas V. Gordon, K. H. Gordon, W. H. Gray, James Halbert, C. Hallinan, W. F. Hamilton, E. A. Harbour, M. L. Harding, George M. Harris, F. J. Hart, L. E. Harter, R. W. Hasse, L. R. Hatchell, William E. Hawthorne, J. W. Hempstead, R. C. Heron, J. H. Higgins, C. C. Hill, J. O. Hite, F. A. Holland, F. Hope, O. L. Hoppe, A. G. Horine, J. W., Jr. Hosack, F. R. Hunt, J. F. Hurley, E. T. Hyatt, E. L. Hynes, M. L. Hypes, H. D. Jennings, W. M. Johnson, W. B. Johnson, W. B. Johnson, W. B. Johnson, W. B. Johnson, W. J. Jones, Frederick P. Kasmeier, J. H. Kasmeier, J. H. Kerwin, J. E. Kerwin, J. E. Kerwin, J. E. Kerwin, J. E. Kulne, W. F. Kuln, E. A. Kurfess, L. S.	2922 1222 1770 4222 243 4122 588 423 767 3055 708 598 4808 588 588 2433 769 4806 608 242 370 4806 608 711 7711 768 3706 769 424 424 424 427 427 427 427 427 427 427

					200
Lewis, A. M	710	Upton, Frank	608		540*
Likarish, John F	548*			Bluggerman I as N	705 304*
Likens, P. O Long, William R	183 711	Valdes, Lorenzo Valadez	370		300
Love, Carl A	370*	Vandiver, E. M	370	Borgrading, Alvin A.	115*
Lowman Howard I.	769	Vandiver, E. M	480	Bowie, W. B.	704
Lunsford, J. T	480	Van Nortwick, J. R	770	Bramman, Walter H.	420 174
Lunsford, J. T. Lushbaugh, G. W. Lyon, T. J.	548 421			Brittingham, John W.	113
Lyon, 1. J	701	Waldis, S. E. Wardwell, W. C. Webb, G. S.	768	Brittingham, John W. Broderick & Bascom Rope Co.	472
		Wardwell, W. C.	370	Broderick, Arthur L.	472
Mackey Harold F	424	Webb, G. S	768 771	Broderick, John K.	472 420
Manetta, E. A	305 480*	Weber, Harold J. Wenk, F. C.	181	Brooks, J Gardner	238*
	771	Wheeling & Lake Frie	57	Broward, C. H.	707
McAlpine, L. W	711	Whipple, J. H., Jr.	370	Brooks, R. G. Broward, C. H. Brown, Elmore C.	236*
McAlpine, L. W. McCunig, D. J. McFall, Thomas G. McFarland, Clarence L. McInnes, H. M.	244	Whipple, J. H., Jr. Whistler, C. W. White, E. D. F.	768	Brown, N. L. Brown, Robert A.	764* 418
McFall, Thomas G.	121 711	Winte, E. D. F	244 368*	Browne, Bard	540
McInnes H M	767	Wightman, J. E., Jr.	769	Brownlee, Samuel L.	541*
Miles, Guy F. Miller, Anthony C. Miller, W. A.	708	Wiggins, C. N	770	Brownlee, Samuel L. Bryan, Charles W., Jr. Buchanan, Walter I.	539
Miller, Anthony C	771	Williams, Frank	708 307	Buchanan, Walter I.	477* 472
Miller, W. A	547* 305*	Winfield, J. H. Woolley, Norman	771	Budd Company	420
Monroe H. Allen	242	Wright, A. L.	422	Bukowsky, G. C.	117
Morris, John P	421*			Bull, T. Bullard Company	418
Morris, Robert L	243			Bullard Company	764 116
Mueller, S. E	307			Burke, Edmond E., Company	544
		Pensonal Mention—Obituaries		Burch, J. Robert Burke, Edmond E., Company Burke, William P. Burt, Roland W. Byers, A. M., Company	420
Nelson, G. W	59			Burt, Roland W.	418*
Nelson, H. M547,	607*	Andreas Dateb W	608	Byers, A. M., Company606,	764
New York, Chicago & St. Louis	57 708	Rodenberger, Joseph F.	59		
Nicholson, J. M. Nicol, J. J. Nylander, E. L. 480,	244	Anderson, Ralph W. Bodenberger, Joseph F. Clark, Frank H. Emerson, George E.	771		
Nylander, E. L	547*	Emerson, George E	183	Campbell, Harry L. Canadian Locomotive Company419,	706
		Gertz, Allan O. Hodges, H. L.	712	Canadian Locometica Company	116 473
Oberkamp, L. P	770	McMunn, William R.	183 370	Candlin, James E. Ir.	298
Oden, Albert N.	771	Purcell, John	712	Candlin, James E. Jr. Capps, W. T.	303
Osborn, Roswell J.	122	Raymond, Allen A	711*	Carbolov Company	542
		Rush, C. R. Sagstetter, William H.	711 424	Carlsen, H. S	363 766
Darley T Lee	307	Sagstetter, William II.	370	Carnegie-Illinois Steel Corp 113, 236, 299,	420
Patterson, I. T.	545	Schepp, George	712*	Carry, Champ	539
Payne, E. R.	243			Caruthers, Eugene W	298*
Parker, J. Lee Patterson, J. T. Payne, E. R. Perkins, J. L. Phelps, H. I. Pierce, J. M. Pike, H. G. Pool Ira G.	480 307			Caruthers, Eugene W. Case, George S., Jr. Caughan, F. M.	419 180
Phelps, H. I	546			Charters, J. D.	477*
Pike, H. G.	182	Supply Trade Notes		Charters, J. D. Chenault, W. P.	303
Pool, Ira G.	58*			Cherry Rivet Company	115
Plummer, W. S	770	Acme Tank Car Corporation	237 ·	Claypoole Richard W	766 236
Pool, Ira G. Plummer, W. S. Ponton, R. L. Potter, Charles G. Prindall, William H.	119	Adamson, A. V.	118	Christopher, J. G. Claypoole, Richard W. Climax Molybdenum Company	707
Prindall, William H.	710	Ainsworth, William P. E. Air Reduction Sales Company	366	Clugh, L. A	174
Prosser, George O370,	422*	Air Reduction Sales Company114,	240 299	Colley, Russell S.	118
		Albert F H	301	Columbia Steel Company	544 476
Quinn, J. J	770	Akers, J. B. Albert, F. H. Alborg Supply & Equipment Co.	115	Columbia Steel Company Combustion Engineering-Superheater, Inc.	
guinn, J. J.		Alexander, Don B	480	118, 237, 366,	418
		Allen, Samuel G	237	Condon, H. R	362*
	MMO	411 D 1		C. L. C.	704
Raby, J. J	770	Alloys Development Company	420	Conway, Stephen S.	704*
Raby, J. J	770 370 307	Alloys Development Company	420 418	Condon, H. R	704* 474* 602
Rasor, H. W	370 307 708	Alloys Development Company Aluminum Company of America	420 418	Cooper-Bessemer Corp	765
Rasor, H. W	370 307 708	Alloys Development Company Aluminum Company of America	420 418 764 56	Cooper-Bessemer Corp	765 474
Rasor, H. W	370 307 708	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. American Brake Shoe Co. Soc. 155, 174, 540, 602,	420 418 764 56 704	Cooper-Bessemer Corp	765 474
Rasor, H. W	370 307 708	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. Sof, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479,	420 418 764 56 704	Cooper-Bessemer Corp	765 474 605 479
Rasor, H. W	370 307 708	Alloys Development Company Aluminum Company of America	420 418 764 56 704 602	Cooper-Bessemer Corp	765 474 605 479
Rasor, H. W	370 307 708	Alloys Development Company Aluminum Company of America	420 418 764 56 704 602	Cooper-Bessemer Corp. 56, Copperweld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S.	765 474 605 479 472 364*
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O.	370 307 708 767 768 307 370 710 120* 771	Alloys Development Company Aluminum Company of America	420 418 764 56 704 602 762	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M.	765 474 605 479 472 364* 602 420
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O.	370 307 708 767 768 307 370 710 120* 771	Alloys Development Company Aluminum Company of America . 242, American AirFilter Company	420 418 764 56 704 602 762 365 479	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Covert, R. M.	765 474 605 479 472 364* 602 420 178*
Rasor, H. W. 307. Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L.	370 307 708 767 768 307 370 710 120* 771	Alloys Development Company Aluminum Company of America	420 418 764 56 704 602 762 365 479	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Covert, R. M.	765 474 605 479 472 364* 602 420 178*
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B.	370 307 708 767 768 307 370 710 120* 771 548 369* 708*	Alloys Development Company Aluminum Company of America . 242, American AirFilter Company	420 418 764 56 704 602 762 365 479 299	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Covert, R. M.	765 474 605 479 472 364* 602 420 178*
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B.	370 307 708 767 768 307 370 710 120* 771 548 369* 708*	Alloys Development Company Aluminum Company of America 242, American AirFilter Company	420 418 764 56 704 602 762 365 479 299 242 116	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Craig, Walter F. Cramer, Raymond H.	765 474 605 479 472 364* 602 420 178* 114 705* 472 707
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B.	370 307 708 767 768 307 370 710 120* 771 548 369* 708*	Alloys Development Company Aluminum Company of America . 242, American AirFilter Company	420 418 764 56 704 602 762 365 479 299 242 116 704	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Craig, Walter F. Cramer, Raymond H.	765 474 605 479 472 364* 602 420 178* 114 705* 472 707
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B.	370 307 708 767 768 307 370 710 120* 771 548 369* 708*	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Edward R. Anderson, Gordon R.	420 418 764 56 704 602 762 365 479 299 242 116 704 479	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Robert B. Craig, Raymond H. Crane, J. S. Crean, Raymond B.	765 474 605 479 472 364* 602 420 178* 114 705* 472 178* 472
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B.	370 307 708 767 768 307 370 710 120* 771 548 369* 708*	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, John H. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Covert, R. M. Cov, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company	765 474 605 479 472 364* 602 420 178* 114 472 705* 472 707 472 178* 420 706
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B.	370 307 708 767 768 307 370 710 120* 771 548 369* 708*	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Covert, R. M. Cov, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company	765 474 605 479 472 364* 602 420 178* 114 472 705* 472 707 472 178* 420 706
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B.	370 307 708 767 768 307 370 710 120* 771 548 369* 708*	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Robert B. Craig, Raymond H. Crane, J. S. Crean, Raymond B.	765 474 605 479 472 364* 602 420 178* 114 472 705* 472 707 472 178* 420 706
Rasor, H. W. 307. Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W.	370 307 708 768 307 370 710 120* 771 548 369* 244 588 710 423 307 606	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Covert, R. M. Cov, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company	765 474 605 479 472 364* 602 420 178* 114 472 705* 472 707 472 178* 420 706
Rasor, H. W. 307. Rath, W. H. 244, Rees, Harry Reid, W. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W.	370 307 708 768 307 370 710 120* 771 548 369* 244 588 710 423 307 606	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F., Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E.	765 476 479 479 472 364* 602 420 178* 114* 472 707 472 707 472 706 116 475*
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L.	370 307 708 767 768 307 710 120* 771 548 369* 708* 244 423 307 606 121* 244 305 768	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F., Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E.	765 476 479 479 479 472 420 178* 114 472 707 472 707 472 706 116 475*
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. L. Smith, M. E. Smith, R. A.	377 708 767 768 307 710 120* 771 548 369* 708* 244 423 307 606 121* 244 305 768	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F., Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E.	765 476 479 479 479 472 420 178* 114 472 707 472 707 472 706 116 475*
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. L. Smith, M. E. Smith, R. A.	377 708 767 768 307 710 120* 771 548 369* 708* 244 423 307 606 121* 244 305 768	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport-Besler Corp.	765 474 605 479 472 364* 602 420 178* 4705* 472 707 472 178* 420 706 116 475*
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. L. Smith, M. E. Smith, R. A.	377 708 767 768 307 710 120* 771 548 369* 708* 244 423 307 606 121* 244 305 768	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E.	765 474 479 479 479 472 420 420 178* 114* 4705* 472 706 56 116 475*
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. L. Smith, M. E. Smith, R. A.	377 708 767 768 307 710 120* 771 548 369* 708* 244 423 307 606 121* 244 305 768	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, John H. Anderson, Marvin 301,	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362*	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E.	765 474 479 479 479 472 420 420 178* 114* 4705* 472 706 56 116 475*
Rasor, H. W. 307, Rath, W. H. 244, Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59, Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242, Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. L. Smith, M. E. Smith, R. A.	377 708 767 768 307 710 120* 771 548 369* 708* 244 423 307 606 121* 244 305 768	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, John H. Anderson, Marvin 301, Arcos Corporation Armour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, Walter P. Arnold, Walter P. Auderson, Aureus J. Auromatic Transportation Co. 240, Baker-Raulang Company 299	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 542	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E.	765 474 479 479 479 472 420 420 178* 114* 4705* 472 706 56 116 475*
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L. Smith, M. E. Smith, R. A. Smith, Robert C., Jr. Smith, R. V. Snyder, R. J. Spangler, P. F. Stancil, W. C. Stark, C. A.	370 307 708 767 768 307 370 710 120* 771 548 369* 708* 244 58 608 710 423 307 606 121* 244 305 768 120 779 778 778 778 778 778 778 778 778 778	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, John H. Anderson, Marvin 301, Arcos Corporation Armour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, Walter P. Arnold, Walter P. Auderson, Aureus J. Auromatic Transportation Co. 240, Baker-Raulang Company 299	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 542	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E.	765 474 479 479 479 472 420 420 178* 114* 4705* 472 706 56 116 475*
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L. Smith, M. E. Smith, R. A. Smith, Robert C., Jr. Smith, R. V. Snyder, R. J. Spangler, P. F. Stancil, W. C. Stark, C. A.	370 307 708 767 768 307 370 710 120* 771 548 369* 708* 244 58 608 710 423 307 606 121* 244 305 768 120 779 778 778 778 778 778 778 778 778 778	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Marvin 301, Arnour Car Lines Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. 240, Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 542	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Craig, Walter F. Craig, Water F. Crane, I. S. Crean, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport-Besler Corp. Davenport-Besler Corp. Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company	765 4765 4765 479 472 364* 602 420 178* 4705* 472 707 472 707 472 706 116 475* 420 706 113 762 174* 420 706 114* 420 706 114* 420 706 114* 420 706 114* 420 706 421 421 421 421 421 421 421 421 421 421
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L. Smith, M. E. Smith, R. A. Smith, Robert C., Jr. Smith, R. V. Snyder, R. J. Spangler, P. F. Stancil, W. C. Stark, C. A.	370 307 708 767 768 307 370 710 120* 771 548 369* 708* 244 58 608 710 423 307 606 121* 244 305 768 120 779 778 778 778 778 778 778 778 778 778	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Marvin Arnour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. 240, Baker-Raulang Company 299 Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Baldwin Locomotive Works 174, 366, 420, 478	420 365 479 242 116 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 418 57 239 116 704 420 305 420 420 420 420 420 420 420 420	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Craig, Walter F. Craig, Water F. Crane, I. S. Crean, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport-Besler Corp. Davenport-Besler Corp. Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company	765 4765 4765 479 472 364* 602 420 178* 4705* 472 707 472 707 472 706 116 475* 420 706 113 762 174* 420 706 114* 420 706 114* 420 706 114* 420 706 114* 420 706 421 421 421 421 421 421 421 421 421 421
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L. Smith, M. E. Smith, R. A. Smith, Robert C., Jr. Smith, R. V. Snyder, R. J. Spangler, P. F. Stancil, W. C. Stark, C. A.	370 307 708 767 768 307 370 710 120* 771 548 369* 708* 244 58 608 710 423 307 606 121* 244 305 768 120 779 778 778 778 778 778 778 778 778 778	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel & Wire Co. 174, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Gordon R. Anderson, Gordon R. Anderson, John H. Anderson, Marvin Arcos Corporation Armour Car Lines Armstrong, C. B. Armstrong, T. Arnold, Paul M. Arnold, Phil Arnold, Delectric P. Aurelius, Marcus J. Automatic Transportation Co. 240, Baker-Raulang Company 299 Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538	420 418 764 56 704 602 762 365 479 299 242 116 704 479 299 242 116 304 242 420 304 240 304 240 304 240 479 299 479 479 479 479 479 479 479 4	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Craig, Walter F. Craig, Water F. Crane, I. S. Crean, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport-Besler Corp. Davenport-Besler Corp. Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company	765 4765 4765 479 472 364* 602 420 178* 4705* 472 707 472 707 472 706 116 475* 420 706 113 762 174* 420 706 114* 420 706 114* 420 706 114* 420 706 114* 420 706 421 421 421 421 421 421 421 421 421 421
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L. Smith, M. E. Smith, R. A. Smith, Robert C., Jr. Smith, R. V. Snyder, R. J. Spangler, P. F. Stancil, W. C. Stark, C. A.	370 307 708 767 768 307 370 710 120* 771 548 369* 708* 244 58 608 710 423 307 606 121* 244 305 768 120 779 778 778 778 778 778 778 778 778 778	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel & Wire Co. 174, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Gordon R. Anderson, Gordon R. Anderson, John H. Anderson, Marvin Arcos Corporation Armour Car Lines Armstrong, C. B. Armstrong, T. Arnold, Paul M. Arnold, Phil Arnold, Delectric P. Aurelius, Marcus J. Automatic Transportation Co. 240, Baker-Raulang Company 299 Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538	420 418 764 56 704 602 762 365 479 299 242 116 704 479 299 242 116 304 242 420 304 240 304 240 304 240 479 299 479 479 479 479 479 479 479 4	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Craig, Walter F. Craig, Water F. Crane, I. S. Crean, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport-Besler Corp. Davenport-Besler Corp. Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company	765 4765 4765 479 472 364* 602 178* 4705* 4707 472 706 116 475* 472 706 116 475* 420 706 113 762 174* 420 706 114 420 706 114 420 706 420 420 420 420 420 420 420 420 420 420
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L. Smith, M. E. Smith, R. A. Smith, Robert C., Jr. Smith, R. V. Snyder, R. J. Spangler, P. F. Stancil, W. C. Stark, C. A.	370 307 708 767 768 307 370 710 120* 771 548 369* 708* 244 58 608 710 423 307 606 121* 244 305 768 120 779 778 778 778 778 778 778 778 778 778	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel & Wire Co. 174, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Gordon R. Anderson, Gordon R. Anderson, John H. Anderson, Marvin Arcos Corporation Armour Car Lines Armstrong, C. B. Armstrong, T. Arnold, Paul M. Arnold, Phil Arnold, Delectric P. Aurelius, Marcus J. Automatic Transportation Co. 240, Baker-Raulang Company 299 Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538	420 418 764 56 704 602 762 365 479 299 242 116 704 479 299 242 116 304 242 420 304 240 304 240 304 240 479 299 479 479 479 479 479 479 479 4	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Craig, Walter F. Craig, Water F. Crane, I. S. Crean, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport-Besler Corp. Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company	765 4765 4765 479 472 364* 602 178* 4705* 4707 472 706 116 475* 706 116 475* 420 706 113 762 174* 420 706 114* 420 706 114* 420 174* 420 706 420 420 420 420 420 420 420 420 420 420
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L. Smith, M. E. Smith, R. A. Smith, Robert C., Jr. Smith, R. V. Snyder, R. J. Spangler, P. F. Stancil, W. C. Stark, C. A.	370 307 708 767 768 307 370 710 120* 771 548 369* 708* 244 58 608 710 423 307 606 121* 244 305 768 120 779 778 778 778 778 778 778 778 778 778	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, John H. Anderson, John H. Anderson, John H. Anderson, Gordon R. Armour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. 240, Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Baldwin Locomotive Works Barco Manufacturing Co. Barnard, W. B. Bartling, A. W.	420 428 418 764 56 704 602 762 365 479 299 242 116 704 479 479 420 304 420 420 420 420 420 420 420 4	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Craig, Walter F. Craig, Water F. Crane, I. S. Crean, Raymond H. Crane, J. S. Crean, Raymond B. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport-Besler Corp. Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company	765 4765 4765 479 472 364* 602 178* 4705* 4707 472 706 116 475* 706 116 475* 420 706 113 762 174* 420 706 114* 420 706 114* 420 174* 420 706 420 420 420 420 420 420 420 420 420 420
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L. Smith, M. E. Smith, R. A. Smith, Robert C., Jr. Smith, R. V. Snyder, R. J. Spangler, P. F. Stancil, W. C. Stark, C. A.	370 307 708 767 768 307 370 710 120* 771 548 369* 708* 244 58 608 710 423 307 606 121* 244 305 768 120 779 778 778 778 778 778 778 778 778 778	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Arnour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Barton Manufacturing Co. Barnard, W. B. Bartling, A. W. Bartling, A. W. Bartling, A. W. Barton Sales Company Bascom, Charles E.	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 368 479 239 116 362* 420 420 420 420 420 420 420 420	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond E. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company D	765 474 472 364* 602 472 364* 602 420 178* 4707 472 707 472 178* 420 706 113 706 113 706 114 7762 475* 4707 475* 4707 4707 4707 4707 4707 4707 4707 470
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. R. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. L. Smith, J. L. Smith, M. E. Smith, R. A. Smith, Robert C., Jr. Smith, R. V. Snyder, R. J. Spangler, P. F. Stancil, W. C. Stark, C. A.	370 307 708 767 768 307 370 710 120* 771 548 369* 708* 244 58 608 710 423 307 606 121* 244 305 768 120 779 778 778 778 778 778 778 778 778 778	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Arnour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Barton Manufacturing Co. Barnard, W. B. Bartling, A. W. Bartling, A. W. Bartling, A. W. Barton Sales Company Bascom, Charles E.	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 368 479 239 116 362* 420 420 420 420 420 420 420 420	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond E. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company D	765 474 472 364* 602 472 364* 602 420 178* 4707 472 707 472 178* 420 706 113 706 113 706 114 7762 475* 4707 475* 4707 4707 4707 4707 4707 4707 4707 470
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. P. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. G. Smith, J. L. Smith, R. A. Smith, Robert C., Jr. Smith, R. A. Smith, Robert C., Jr. Smyder, R. J. Spangler, P. F. Stancil, W. C. Starkweather, Frank E. Stein, H. J. Stemshorn, E. P. Stewart, John I. Stewart, John I. Stillings, Hugh W. Stone, Ray D. Swartwood, C. N. Sweeley, E. A.	370 307 708 767 768 307 370 711 548 369* 708* 244 58 606 710 423 305 769 709 58 422 480 244 709 709 709 709 709 709 709 709	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Arnour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Barton Manufacturing Co. Barnard, W. B. Bartling, A. W. Bartling, A. W. Bartling, A. W. Barton Sales Company Bascom, Charles E.	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 368 479 239 116 362* 420 420 420 420 420 420 420 420	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Craner, Ravmund H. Crane, J. S. Crean, Raymond H. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company Dearborn	705 474 420 178* 420 705 116 475* 420 706 240 113 762 418 419 419 419 766 116 765 766 116 76 76 76 76 76 76 76 76 76 76 76 76 76
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. P. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. G. Smith, J. L. Smith, R. A. Smith, Robert C., Jr. Smith, R. A. Smith, Robert C., Jr. Smyder, R. J. Spangler, P. F. Stancil, W. C. Starkweather, Frank E. Stein, H. J. Stemshorn, E. P. Stewart, John I. Stewart, John I. Stillings, Hugh W. Stone, Ray D. Swartwood, C. N. Sweeley, E. A.	370 307 708 767 768 307 370 711 548 369* 708* 244 58 606 710 423 305 769 709 58 422 480 244 709 709 709 709 709 709 709 709	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Arnour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Barton Manufacturing Co. Barnard, W. B. Bartling, A. W. Bartling, A. W. Bartling, A. W. Barton Sales Company Bascom, Charles E.	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 368 479 239 116 362* 420 420 420 420 420 420 420 420	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Craner, Ravmund H. Crane, J. S. Crean, Raymond H. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company Dearborn	705 474 420 178* 420 705 116 475* 420 706 240 113 762 418 419 419 419 766 116 765 766 116 76 76 76 76 76 76 76 76 76 76 76 76 76
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. P. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. G. Smith, J. L. Smith, R. A. Smith, Robert C., Jr. Smith, R. A. Smith, Robert C., Jr. Smyder, R. J. Spangler, P. F. Stancil, W. C. Starkweather, Frank E. Stein, H. J. Stemshorn, E. P. Stewart, John I. Stewart, John I. Stillings, Hugh W. Stone, Ray D. Swartwood, C. N. Sweeley, E. A.	370 307 708 767 768 307 370 711 548 369* 708* 244 58 606 710 423 305 769 709 58 422 480 244 709 709 709 709 709 709 709 709	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Arnour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Barton Manufacturing Co. Barnard, W. B. Bartling, A. W. Bartling, A. W. Bartling, A. W. Barton Sales Company Bascom, Charles E.	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 368 479 239 116 362* 420 420 420 420 420 420 420 420	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Craner, Ravmund H. Crane, J. S. Crean, Raymond H. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company Dearborn	705 474 420 178* 420 705 116 475* 420 706 240 113 762 418 419 419 419 766 116 765 766 116 76 76 76 76 76 76 76 76 76 76 76 76 76
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. P. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. G. Smith, J. L. Smith, R. A. Smith, Robert C., Jr. Smith, R. A. Smith, Robert C., Jr. Smyder, R. J. Spangler, P. F. Stancil, W. C. Starkweather, Frank E. Stein, H. J. Stemshorn, E. P. Stewart, John I. Stewart, John I. Stillings, Hugh W. Stone, Ray D. Swartwood, C. N. Sweeley, E. A.	370 307 708 767 768 307 370 711 548 369* 708* 244 58 606 710 423 305 769 709 58 422 480 244 709 709 709 709 709 709 709 709	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Arnour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Barton Manufacturing Co. Barnard, W. B. Bartling, A. W. Bartling, A. W. Bartling, A. W. Barton Sales Company Bascom, Charles E.	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 368 479 239 116 362* 420 420 420 420 420 420 420 420	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond E. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company D	765 474 605 479 472 364* 602 478 470 472 470 472 470 472 470 472 470 475* 470 475* 470 475* 476 475* 476 475* 476 476 476 476 476 476 476 476 476 476
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. P. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. G. Smith, J. L. Smith, R. A. Smith, Robert C., Jr. Smith, R. A. Smith, Robert C., Jr. Smyder, R. J. Spangler, P. F. Stancil, W. C. Starkweather, Frank E. Stein, H. J. Stemshorn, E. P. Stevens, W. Vaughn Stewart, John I. Stillings, Hugh W. Stone, Ray D. Swartwood, C. N. Swartwood, C. N. Swartwood, C. N. Swartwood, C. N. Sweeley, E. A. Taylor, A. E. 24 Taylor, C. A. Teuf, Walter O.	370 307 708 767 768 307 370 711 548 369* 708* 244 58 606 710 423 305 769 779 120* 78* 606 121* 244 305 768 423 305 769 779 424 430 440 440 440 440 440 440 44	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Arnour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Barton Manufacturing Co. Barnard, W. B. Bartling, A. W. Bartling, A. W. Bartling, A. W. Barton Sales Company Bascom, Charles E.	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 368 479 239 116 362* 420 420 420 420 420 420 420 420	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond E. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company D	765 474 605 479 472 364* 602 478 470 472 470 472 470 472 470 472 470 475* 470 475* 470 475* 476 475* 476 475* 476 476 476 476 476 476 476 476 476 476
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. P. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. G. Smith, J. L. Smith, R. A. Smith, Robert C., Jr. Smith, R. A. Smith, Robert C., Jr. Smyder, R. J. Spangler, P. F. Stancil, W. C. Starkweather, Frank E. Stein, H. J. Stemshorn, E. P. Stevens, W. Vaughn Stewart, John I. Stillings, Hugh W. Stone, Ray D. Swartwood, C. N. Swartwood, C. N. Swartwood, C. N. Swartwood, C. N. Sweeley, E. A. Taylor, A. E. 24 Taylor, C. A. Teuf, Walter O.	370 307 708 767 768 307 370 711 548 369* 708* 244 58 606 710 423 305 769 779 120* 78* 606 121* 244 305 768 423 305 769 779 424 430 440 440 440 440 440 440 44	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Arnour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Barton Manufacturing Co. Barnard, W. B. Bartling, A. W. Bartling, A. W. Bartling, A. W. Barton Sales Company Bascom, Charles E.	420 418 764 56 704 602 762 365 479 299 242 116 704 479 766 362* 420 304 240 418 57 420 368 479 239 116 362* 420 420 420 420 420 420 420 420	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond E. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company D	765 474 605 479 472 364* 602 478 470 472 470 472 470 472 470 472 470 475* 470 475* 470 475* 476 475* 476 475* 476 476 476 476 476 476 476 476 476 476
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. P. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. G. Smith, J. L. Smith, R. A. Smith, Robert C., Jr. Smith, R. A. Smith, Robert C., Jr. Smyder, R. J. Spangler, P. F. Stancil, W. C. Starkweather, Frank E. Stein, H. J. Stemshorn, E. P. Stevens, W. Vaughn Stewart, John I. Stillings, Hugh W. Stone, Ray D. Swartwood, C. N. Swartwood, C. N. Swartwood, C. N. Swartwood, C. N. Sweeley, E. A. Taylor, A. E. 24 Taylor, C. A. Teuf, Walter O.	370 307 708 767 768 307 370 711 548 369* 708* 244 58 606 710 423 305 769 779 120* 78* 606 121* 244 305 768 423 305 769 779 424 430 440 440 440 440 440 440 44	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, 116, 175, 298, 605, 704, 706, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, John H. Anderson, Marvin 301, Aroos Corporation 301, Armour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Auelius, Marcus J. Automatic Transportation Co. 240, Baker-Raulang Company 299 Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Baldwin Locomotive Works 174, 366, 420, 478 Barco Manufacturing Co. Barnard, W. B. Bartlett, R. W. Bartling, A. W. Barton Sales Company Bascom, Charles E. Bascom, Joseph H. Batt, William L. Beardslee, Kenneth R. Beck, C. H. 116 Biggs, Fred P. Billeter, Arno L. Binder, W. J. Binks Manufacturing Company Plack & Decker Manufacturing Co. Binks Manufacturing Company Black & Decker Manufacturing Company	420 418 764 56 704 602 762 365 479 299 242 116 704 479 299 242 116 362* 424 420 418 57 239 116 362* 479 479 249 479 242 418 57 420 479 479 479 479 479 479 479 479	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond E. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company D	765 474 605 479 472 364* 602 478 470 472 470 472 470 472 470 472 470 475* 470 475* 470 475* 476 475* 476 475* 476 476 476 476 476 476 476 476 476 476
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. P. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. G. Smith, J. L. Smith, R. A. Smith, Robert C., Jr. Smith, R. A. Smith, Robert C., Jr. Smyder, R. J. Spangler, P. F. Stancil, W. C. Starkweather, Frank E. Stein, H. J. Stemshorn, E. P. Stevens, W. Vaughn Stewart, John I. Stillings, Hugh W. Stone, Ray D. Swartwood, C. N. Swartwood, C. N. Swartwood, C. N. Swartwood, C. N. Sweeley, E. A. Taylor, A. E. 24 Taylor, C. A. Teuf, Walter O.	370 307 708 767 768 307 370 711 548 369* 708* 244 58 606 710 423 305 769 779 120* 78* 606 121* 244 305 768 423 305 769 779 424 430 440 440 440 440 440 440 44	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Arch Co. American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, 116, 175, 298, 605, 704, 706, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. 174, American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, John H. Anderson, Marvin 301, Aroos Corporation 301, Armour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Auelius, Marcus J. Automatic Transportation Co. 240, Baker-Raulang Company 299 Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Baldwin Locomotive Works 174, 366, 420, 478 Barco Manufacturing Co. Barnard, W. B. Bartlett, R. W. Bartling, A. W. Barton Sales Company Bascom, Charles E. Bascom, Joseph H. Batt, William L. Beardslee, Kenneth R. Beck, C. H. 116 Biggs, Fred P. Billeter, Arno L. Binder, W. J. Binks Manufacturing Company Plack & Decker Manufacturing Co. Binks Manufacturing Company Black & Decker Manufacturing Company	420 418 764 56 704 602 762 365 479 299 242 116 704 479 299 242 116 362* 424 420 418 57 239 116 362* 479 479 249 479 242 418 57 420 479 479 479 479 479 479 479 479	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Cramer, Raymond H. Crane, J. S. Crean, Raymond E. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company D	765 474 605 479 472 364* 602 478 470 472 470 472 470 472 470 472 470 475* 470 475* 470 475* 476 475* 476 475* 476 476 476 476 476 476 476 476 476 476
Rasor, H. W. 307. Rath, W. H. 244. Rees, Harry Reid, W. R. P. Rennie, R. P. Richardson, R. D. Ringland, W. G. 59. Robinson, L. L., Jr. Robson, John L. Rose, John O. Ross, Charles Ryan, John F. 242. Rykoskey, F. B. Sauve, J. E. Schey, R. Schleihs, F. J. Schoedinger, E. H. Schuette, L. E. Schwartz, C. F. Sheehan, John W. Sineath, Frank D. Smith, J. G. Smith, J. G. Smith, J. L. Smith, R. A. Smith, Robert C., Jr. Smith, R. A. Smith, Robert C., Jr. Smyder, R. J. Spangler, P. F. Stancil, W. C. Starkweather, Frank E. Stein, H. J. Stemshorn, E. P. Stewart, John I. Stewart, John I. Stillings, Hugh W. Stone, Ray D. Swartwood, C. N. Sweeley, E. A.	370 307 708 767 768 307 370 711 548 369* 708* 244 58 606 710 423 305 769 779 120* 78* 606 121* 244 305 768 423 305 769 779 424 430 440 440 440 440 440 440 44	Alloys Development Company Aluminum Company of America 242, American AirFilter Company 241, American Brake Shoe Co. 56, 115, 174, 540, 602, American Car & Foundry Co. 238, 419, 479, American Locomotive Company 116, 175, 298, 605, 704, 706, American Locomotive Company; General Electric Company American Steel & Wire Co. 113, American Steel Foundries American Welding & Manufacturing Co. American Wheelabrator & Equipment Corp. Anderson, Edward R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Anderson, Gordon R. Armour Car Lines Armstrong, C. B. Armstrong, T. Arnall, Paul M. Arnold, L. E. Arnold, Phil Arnold, Walter P. Aurelius, Marcus J. Automatic Transportation Co. 240, Baker-Raulang Company Baldinger, John A. Baldwin-Lima-Hamilton Corporation 538 Baldwin Locomotive Works Barco Manufacturing Co. Barnard, W. B. Bartlett, R. W. Bartling, A. W. Barton Sales Company Bascom, Charles E. Bascom, Joseph H. Batt, William L. Beerdslee, Kenneth R. Beck, C. H. Billeter, Arno L. Binder, W. J. Billeter, Arno L. Binder, W. J. Billeter, Arno L. Binder, W. J. Billeter, C. P.	420 418 764 56 704 602 762 365 479 299 242 116 704 479 299 242 116 362* 424 420 418 57 239 116 362* 479 479 249 479 242 418 57 420 479 479 479 479 479 479 479 479	Cooper-Bessemer Corp. 56, Copper-Weld Steel Company Corcoran, John F. Cordes, Wilmer H. Cordley & Hayes Corneille, Walter S. Corr, W. E. Costley, W. M. Covert, R. M. Cox, Charles R. Coyne, R. T. Craig, Robert B. Craig, Walter F. Jr. Craner, Ravmund H. Crane, J. S. Crean, Raymond H. Cummins Engine Company Cuneo, J. A. Cushing, Reginald C. Custar, William E. Daley, Edward Dallman, D. E. Dampney Company of America Davenport, James E. David, Bernard E. David, Bernard E. Davis, John J., Jr. Dawson, Robert Dayton Rubber Company Dearborn Chemical Company Dearborn	765 474 605 479 472 364* 602 478 470 472 470 472 470 472 470 472 470 475* 470 475* 470 475* 476 475* 476 475* 476 476 476 476 476 476 476 476 476 476

*

* *

Faton Manutastrone Commen	200	The Late Manufacturing Comments	E44	Mouths T I	364
Eaton Manutacturing Company Ebdon, H. G.	298 366	Haskelite Manufacturing Corporation	538*	Mauthe, J. L. Mayer, Charles W.	765
Edgar, A. G.	420		237	Meister H O K.	473
Edgewater Steel Company Edison, Charles Edison, Thomas A., Inc. 418,	765	Hawkins, George A. Hayes, Frank U. Hayward, Thomas Z. Heaton, W. E. Heinritz, M. W. Hellstrom, John Henderson, L. V. Hendrickson, A. G. Hendrickson, Robert N.	764	Mercier, W. J	418
Edison, Charles	545	Heaton W F	418*	Metal & Thermit Corp.	420
Ehrhart, T. J. Eighmy, Lee W., Jr. Eldred, George Electric Service Manufacturing Co. Electric Storage Battery Co	419	Heinritz, M. W.	602	Michaels, Hunter Michels, Norman C. Micromatic Hone Corporation	762
Eighmy, Lee W., Jr.	706	Hellstrom, John	764	Michels, Norman C.	236
Eldred, George	545	Henderson, L. V.	761	Milburn Alexander Inc.	545 544
Electric Storage Battery Co	704	Hendrickson, Robert N	241	Milburn, Alexander, Inc. Miller, F. A. Miller, William G. Mincapolis-Honeywell Regulator	363
Electro-Motive Division, General Motors	,04	Hennessy Lubricator Company	472	Miller, William G	298
Corporation	362	Hennessy Lubricator Company Hickey, S. Wayne Higgins, P. M.	178	Minneapolis-Honeywell Regulator	
Elg, E. G.	474*	Higgins, P. M.	762	Co	602 242*
Elleon Company	478* 118	Hill, Robert D. Hoelzel, William N.	114	Moffett Frank E.	303
Ellicott, Charles R., Ir	301*	Holmes I D	114*	Mohn, Louis	116
Elliott, John H	236	Holmes, J. D. Hood, Clifford F.	113	Mohn, Louis Moline, Carl R. Monsler, Melvin O.	235*
Ellis, Dan S	704	Hope, G. A	766	Monsler, Melvin O	298
Corporation	237 762	Horn, Dr. Kent R.		Monteith, Floyed 56, 706,	114*
Engh. A. C.	762	Huber, Walter A. Huck Manufacturing Company	241		
Engstrom, A. H.	761	Hull, J. B.	236*	Moore, Ross R	704*
		Hull, J. B. Hulson Company	762	Moorhead, A. H	303 418
Escoffier, A. W. Eutectic Welding Alloys Corp 113, 475,	240 541	Hunt-Spiller Manufacturing Corp. 181, 420,	761	Morgan, James C.	419
Evans, Ronald K	603	Hutchins. A	703*	Morris, W. S	365
		Hyatt Bearings Division, General Motors	400	Morse, C. H., Jr	704
Fairbanks, Morse & Co.		Corporation	473 420	Moody, Robert F. Moore, Ross R. Moorhead, A. H. Moran, R. T. Morgan, James C. Morris, W. S. Morse, C. H., Jr. Morse, Robert H., Col. Morse, Robert H., Jr.	302 302*
56, 237, 302, 365, 479, 603,	704	Hyman-Michaels Company Hyster Company299, 420, 480, 703,	765	Mulcahy, E. T.	174
Fairbanks, Morse & Co.; Canadian	419	Hyster Company	,	Mulcahy, E. T. Mulcahy, William E.	761
Fairbanks, Morse Company Fairman, F. E.	471*		BCO.	Mulvena, C. J. Munnikhuysen, W. F. Murray, D. J., Manufacturing Co	420
Waron W A	471*	Inland Steel Company 113, 420, Iron & Steel Products, Inc	762 602	Munnikhuysen, W. F	303 707
Farrell, George R.	303*	Irving T. P	117	Myers. John F.	472
Fate-Root-Heath Company	420 545	Irvington Varnish & Insulator Co	761	McCartney, James F	439
Filsinger, Raymond H., Jr.	420			McCartney, John H 707,	762
Feldman, W. H. Filsinger, Raymond H., Jr. Finnell, H. W., Jr. Fischer, Frank H. 303,	241	Tackson P P	236*	McCartney, James F. McCartney, John H. McCartney, John H. McClements, Samuel, Jr. McColl, Robert B. 116.	300 175*
Fisher, Frank H	362* 418	Jackson, R. P. Janette Manufacturing Company	236	McConnor, William F. 110, McConnor, William F. 542, McCormick, John A. 419, McCulloch, Paul L., Jr. McDongall-Butler Company	604*
Fisher, J. W. Flannery Bolt Company	707	Janis, Mal	363	McCormick, John A 419,	473*
Flannery, Eugene C.	117	Jarrett, Dr. Tracy	761 299	McCulloch, Paul L., Jr	115
Flannery, Eugene C. Flannery Manufacturing Company	707	Jennison-Wright Corporation Johns-Manville Sales Corp.	56	McDonald, A. J	299 241
Fontaine, J. E	366 420	Johnson A S	418	McGara, I. L.	235*
Fontaine, J. E. Foote, Frederick D. Frank, W. G. Franks, K. W.	241	Johnson, A. S	472	McGara, J. L. McKee, William J	605*
Franks, K. W.	418	Johnson, R. E. Johnson, R. E. Johnson, Roy F. 472, Johnson, T. C., Company 421, Johnstone, R. B.	418	McKnight, William A. McLaren, A. M. McNeill, A. L.	174
Franzreb, Thomas Fraser, D. W	537	Johnson, Roy F 472,	539* 472	McLaren, A. M	56 298*
Fraser, D. W	176*	Johnson, I. C., Company	301	McVeigh, John	173
Fredette, R. G. French Mill Supply Corporation	181 765	Jones, Dr. F. L. Jordan, Harvey B.	002	and the second s	
Frey, Emil F. Frick, Raymond A.	765	Jordan, Harvey B	114	Notice 1 Alicelant Com	100
Frick, Raymond A	540			National Battery Company	180 602
Fulleman, John Fulton, L. S. Funk, Grady R.	765	Kaiser Aluminum & Chemical Corp	299	National Brake Company 57,	118
Funk, Grady R.	420 418	Kaiser Aluminum & Chemical Sales, Inc.	299	National Lock Washer Company 544.	602
	***	Kaiser, Fred	115	National Malleable & Steel Castings Co	303
Gammon, F. Royal	300	Kalish, David F Kansas City Car Company	477 237	National Tube Company 542, 604,	706 706
Gann, J. W. Garlock Packing Company116	307	Karakoosh Robert	544	National George O. Naylor, Norman C. Neal, Glenn F. Neff Equipment Company	366*
Garlock Packing Company 116	, 762 472*	Karpen, S., & Bros. Kavanagh, Edward W. Kennametal, Inc. 173, 419,	238	Neal, Glenn F	419
Gauss, J. H. Gearhart, J. A.	307	Kavanagh, Edward W	235 544	Nett Equipment Company	236 421
		Kennametal, Inc. 173, 419, Kennedy, J. L. Kerite Company Kidd, Henry M. Killmer, Harold D.	307	Nelson Equipment Distributors	240
General Electric Company 238, 420, 471, 538, 602, 703 General Motors Corporation 472, 704 General Motors Corporation, Electro-Motiva	700	Kerite Company	705	Nelson, Herman, Division; American Air	
General Motors Corporation 472 704	, 762 , 766	Kidd, Henry M	765	Filter Co	241
General Motors Corporation, Electro-Motive	, , , ,	Killmer, Harold D	544 56	Nelson, Richard H Nelson, Robert W	241 241
		King, John S. Kingsley, William H.	56	Neville, J. S. O. Nickel Cadmium Battery Corp 545,	56
General Motors Diesel Ltd 174, General Steel Castings Corporation	542*	Kittredge, Donald F.	303	Nickel Cadmium Battery Corp 545,	602
410 473	, 537	Klein, Thomas F	174 420	Niles, William I.	20-
George, William C.	174*	Klunder Harvey	236	Nobile, V. P. Nook & O'Neill, Inc.	418 240
Georgia-Pacific Plywood & Lumber Co., 236	, 762	Klunder, Harvey Kniff, Thomas J., Jr. Koeneman, Ralph F.	419	Norberg, R. C.	116
Giddings & Lewis Machine Tool Co Gilles Machinery Company	239	Koeneman, Ralph F	479	Norberg, R. C	299
Gillette, J. R	762	Koppers Company 236, 303, 362, 602, Kottsieper, W. R.	761 602	Nugent, Frank B., Company	545
Gillette, J. R. 366 Gilliam, John W., Jr. Girady, Fred Given, William B., Jr.	542	Rousieper, W. R	002	Nystrom, A. V	304
Given William P 7-	. 298				
Glidden Company	. 704 . 420	Lamson & Sessions Company419,	475 298	O'Connor, A. F. Ohnell, Ernst, Jr.	176*
Glidden Company Glossbrenner, Alfred S. Goodloe, G. M. Goodrich, B. F., Company Gordon, Calud S., Company Gould-National Batteries, Inc.	364	Lathrop, Charles T. Leary, Robert G.	545	Okonite Company	705
Goodloe, G. M.	. 364*		F 4 9	Olds, William E.	479
Gordon, Calud S. Company	. 118	Lewis, O. O	365*	Olds, William E. Olsen, Charles K.	367
Gould-National Batteries, Inc.	602	Lima-Hamilton Corp 174,	237 479	Olsen, O. L.	301
		List, Walter Gordon	420	Olsen, O. L. Olson, W. E. Onan, D. W., & Sons, Inc.	545 421
Gouldthorpe, H. W 300, 363* 472*	, 602	Littleton, Edward J	299	Orme Company	57
Graham, J. G		Livingstone John F Company	544	Ortner Company	703
C	703	Livingstone, John L., Company			603*
Grandy, S	763*	Lochner, P. R.	177*	Osborn, C. R.	
Granite City Tool Company	763* 766	Lewis, O. O	177* 303 544	Oxsen, Howard Oxweld Railroad Service Co. 57	237
Grante City Tool Company	703 763* 766	Lochner, P. R. Locomotive Finished Material Company Lodge & Shipley Co. Lofton, E. K.	177* 303 544 419	Oxsen, Howard Oxweld Railroad Service Co 57,	237 118
Granite City Tool Company Grant, William J. Gray. William E	703 763* 766 56	Lochner, P. R. Locomotive Finished Material Company Lodge & Shipley Co. Lofton, E. K. Lose, James E.	177* 303 544 419 114	Oxweld Railroad Service Co 57,	
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company	703 763* 766 56 174* 366	Lochner, P. R. Locomotive Finished Material Company Lodge & Shipley Co. Lofton, E. K. Lose, James E. Lundy, E. A., Company Lunkenheimer Company 174, Lunkenheimer Company 174,	177* 303 544 419 114 707 472	Oxweld Railroad Service Co	266
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company	703 763* 766 56 174* 366	Lochner, P. R. Locomotive Finished Material Company Lodge & Shipley Co. Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57,	177* 303 544 419 114 707 472	Oxweld Railroad Service Co	266
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company The Compa	703 763* 766 56 174* 366 117 174	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57,	419 114 707 472	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419,	366 420 762 473*
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company The Compa	703 763* 766 56 174* 366 117 174	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57,	419 114 707 472	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419,	366 420 762 473*
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company The Compa	703 763* 766 56 174* 366 117 174	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57, Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C. & Co.	419 114 707 472 236 241 545	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E.	366 420 762 473* 304 303
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company The Compa	703 763* 766 56 174* 366 117 174	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57, Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C. & Co.	419 114 707 472 236 241 545	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melyin W.	366 420 762 473* 304 303 419*
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company The Compa	703 763* 766 56 174* 366 117 174	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57, Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MosNeel, A. I.	419 114 707 472 236 241 545 56 301	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melyin W.	366 420 762 473* 304 303 419*
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greeger, Henrick Griffin Wheel Company	703 763* 766 56 174* 366 117 174	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57, Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MacNeal, A. J. Madely, Charles P.	419 114 707 472 236 241 545 56 301 707	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck. Z. G.	366 420 762 473* 304 303 419* 472 236 420
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company Griffin Wheel Company Grove, George R. Gulick, H. V. Gunderson, L. O. Gunetti, Harry C. Gustafson, A. C.	703 763* 766 56 174* 366 117 117 174 420 762 174 704 174 303 763	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57, Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MacNeal, A. J. Madely, Charles P. Magnaflux Corporation	419 114 707 472 236 241 545 56 301 707 705	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck, Z. G. Pedginse, D. E. Peens Don I	366 420 762 473* 304 303 419* 472 236 420 418
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company Griffin Wheel Company Grove, George R. Gulick, H. V. Gunderson, L. O. Gunetti, Harry C. Gustafson, A. C.	703 763* 766 56 174* 366 117 117 174 420 762 174 704 174 303 763	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57, Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MacNeal, A. J. Madely, Charles P. Magnaflux Corporation Magnus Chemical Company Mahanes, C.	236 241 545 56 301 707 705 114 542	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck, Z. G. Pedginse, D. E. Peerless Equipment Co. 113	366 420 762 473* 304 303 419* 472 236 420
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company Grip Nut Company Grove, George R. Gulick, H. V. Gunderson, L. O. Gunetti, Harry C. Gustafson, A. C. Haas, W. H. Hagan, Edmond J. Haight, Henry S.	763* 766* 56* 56* 174* 366* 117 420 762 174 303 763 763	Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MacNeal, A. J. Madely, Charles P. Magnaflux Corporation Magnus Chemical Company Mahanes, C. Maher, James P.	419 114 707 472 236 241 545 56 301 707 705 114 542	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck, Z. G. Pedginse, D. E. Peeps, Don J. Peerless Equipment Co. 113, Peerless Supply Company	366 420 762 473* 304 303 419* 472 236 420 418 114 174 544
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company Grove, George R. Gulick, H. V. Gunderson, L. O. Gunetti, Harry C. Gustafson, A. C. Haas, W. H. Hagan, Edmond J. Haight, Henry S. Haman, Ralph	763* 766* 766* 566* 174* 366* 1174 420 762* 174 704 174 303 763	Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MacNeal, A. J. Madely, Charles P. Magnaflux Corporation Magnus Chemical Company Mahanes, C. Maher, James P.	419 114 707 472 236 241 545 56 301 707 705 114 542	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck, Z. G. Pedginse, D. E. Peeps, Don J. Peerless Equipment Co. 113, Peerless Supply Company	366 420 762 473* 304 303 419* 472 236 420 418 114 174 544 241*
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company 70 Grove, George R. Gulick, H. V. Gunderson, L. O. Gunetti, Harry C. Gustafson, A. C. Haas, W. H. Hagan, Edmond J. Haight, Henry S. Haman, Ralph Hardy, C. L.	763* 766* 766* 566* 174* 366* 1174 420 762* 174 704 174 303 763 299 366 542 298 418*	Maag, Ogden J. MacClurkan, Samuel MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MacNeal, A. J. Madely, Charles P. Magnus Chemical Company Mahanes, C. Mahanes, C. Mahanes, C. Manna, O. J. Mangnase Steel Forge Company	419 114 707 472 236 241 545 56 301 707 705 114 542	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck, Z. G. Pedginse, D. E. Peeps, Don J. Peerless Equipment Co. Peerless Supply Company Penl, Frank G. Permanente Metals Corporation	366 420 762 473* 303 419* 472 236 420 418 114 174 544 241* 299
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company 70 Grove, George R. Gulick, H. V. Gunderson, L. O. Gunetti, Harry C. Gustafson, A. C. Haas, W. H. Hagan, Edmond J. Haight, Henry S. Haman, Ralph Hardy, C. L.	763* 766* 766* 566* 174* 366* 1174 420 762* 174 704 174 303 763 299 366 542 298 418*	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57, Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MacNeal, A. J. Madely, Charles P. Magnafux Corporation Magnus Chemical Company Mahanes, C. Maher, James P. Malina, O. J. Manganese Steel Forge Company 117, Marchmont, G. T. Martenis, William W.	236 241 545 301 707 705 114 542 113 706 235 366	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck, Z. G. Pedginse, D. E. Peeps, Don J. Peerless Equipment Co. Peerless Supply Company Penl, Frank G. Permanente Metals Corporation	366 420 762 473* 304 303 419* 472 236 420 418 114 174 544 241* 299 299
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company 70 Grove, George R. Gulick, H. V. Gunderson, L. O. Gunetti, Harry C. Gustafson, A. C. Haas, W. H. Hagan, Edmond J. Haight, Henry S. Haman, Ralph Hardy, C. L.	763* 766* 766* 566* 174* 366* 1174 420 762* 174 704 174 303 763 299 366 542 298 418*	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57, Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MacNeal, A. J. Madely, Charles P. Magnafux Corporation Magnus Chemical Company Mahanes, C. Maher, James P. Malina, O. J. Manganese Steel Forge Company 117, Marchmont, G. T. Martenis, William W. Martinez, Al Martinez, Al Martinez, Raymond A.	236 241 545 545 561 707 705 114 542 113 366 235 366 477	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck, Z. G. Pedginse, D. E. Peeps, Don J. Peerless Equipment Co. Peerless Equipment Co. Peerless Supply Company Penl, Frank G. Permanente Metals Corporation Permanente Products Company Perry, J. H., Jr. Peterson, Clarence L.	366 420 762 473* 304 303 419* 472 236 420 418 114 174 544 241* 299 299 765 115
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company 70 Grove, George R. Gulick, H. V. Gunderson, L. O. Gunetti, Harry C. Gustafson, A. C. Haas, W. H. Hagan, Edmond J. Haight, Henry S. Haman, Ralph Hardy, C. L.	763* 766* 766* 566* 174* 366* 1174 420 762* 174 704 174 303 763 299 366 542 298 418*	Lofton, E. K. Lose, James E. Lundy, E. A., Company 174, Lunkenheimer Company 57, Maag, Ogden J. MacClurkan, Samuel MacDonald, B. C., & Co. MacLeod, J. A. MacNeal, A. J. Madely, Charles P. Magnafux Corporation Magnus Chemical Company Mahanes, C. Maher, James P. Malina, O. J. Manganese Steel Forge Company 117, Marchmont, G. T. Martenis, William W. Martinez, Al Martinez, Al Martinez, Raymond A.	236 241 545 545 561 707 705 114 542 113 366 235 366 477	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck, Z. G. Pedginse, D. E. Peerless Equipment Co. 113, Peerless Equipment Co. 113, Peerless Equipment Co. Permanente Metals Corporation Permanente Metals Company Perry, J. H., Jr. Peterson, Clarence L. Peterson, I. S.	366 420 762 473* 304 303 419* 472 236 420 418 114 174 544 241* 299 765 115
Granite City Tool Company Grant, William J. Gray, William E. Graybar Electric Company Greenville Steel Car Company Greger, Henrick Griffin Wheel Company Grove, George R. Gulick, H. V. Gunderson, L. O. Gunetti, Harry C. Gustafson, A. C. Haas, W. H. Hagan, Edmond J. Haight, Henry S. Haman, Ralph	763* 766* 766* 566* 174* 366* 1174 420 762* 174 704 174 303 763 299 366 542 298 418*	Maag, Ogden J. MacClurkan, Samuel MacClurkan, Samuel MacLeod, J. A. MacNeal, A. J. Madely, Charles P. Magnafux Corporation Magnus Chemical Company Mahanes, C. Maher, James P. Malina, O. J. Manganes Steel Forge Company Martenis, William W. Martenis, William W. Martenis, William W.	236 241 545 545 561 707 705 114 542 113 366 235 366 477	Oxsen, Howard Oxweld Railroad Service Co. 57, Palin, A. W. Page, William Palmer, Charles F., Jr. Park, Howard F., Jr. 419, Parr, E. H. Patterson, A. E. Patterson, Robert G. Pauly, Melvin W. Payne, John E. Peck, Z. G. Pedginse, D. E. Peeps, Don J. Peerless Equipment Co. Peerless Equipment Co. Peerless Supply Company Penl, Frank G. Permanente Metals Corporation Permanente Products Company Perry, J. H., Jr. Peterson, Clarence L.	366 420 762 473* 304 303 419* 472 236 420 418 114 174 544 241* 299 765 115

	114	Spring Packing Corp	235	Weiland, Alfred O	237*
Pittsburgh Screw & Bolt Corp. Platt, Harry C.	56	Stahl, Henry W	56	Weiss, V. R 235.	365
Porter, H. K., Company 235,	762	Standard Car Truck Co	57	Welch, E. M.	174
Prescott, D. C	418 704	Standard Railway Equipment Manufactur-	479		545
Pressed Steel Car Company 298, 705,	761	ing Co. Starbuck, William H. Stearns, D.	56		236. 236
Pritchard, J. T	56	Stearns, D	420	Westinghouse Electric Supply Co	472
Pullman-Standard Car Manufacturing	F 20	Stearns, Neele E	113		367
Co	539 364		420 420		540 704
Pyle-National Company 174, 241,		Stone Supply Company	236		236
		Strauss & Hass, Inc	544	Wilhelmy, George F.	303*
D. 1 . 1 C 1 . 0 E	202		236		367
Railroad Supply & Equipment, Inc Railway Mechanical and Electrical			540 706	Williams, B. S., Co	366 477*
Engineer	178	Surcheck, J. G.	173	Williford, N. B.	537
Engineer Rausch, C. C. Rayburn, James G. Reed, L. C. Reed Roller Bit Company 707,	173	Surcheck, J. G. Sylvester, I. I.	56	Wilson, Charles E	704
Rayburn, James G	475	Symington-Gould Corp	703	Wilson Engineering Corporation 420,	480
Reed Roller Bit Company 707	762 766			Wisner, E. R.	420 539
Rentschler, George A.	538	Tabler, P. D	764	Wisner, Inc.	236
Rentschler, George A. Ressler, Harold B.	418*	Taylor Wharton Iron & Steel Co	761	Wood, J. Leonard	238
Reynolds, A. H	174		.762	Wood, Robert T.	418
Rigidized Metals Corporation	545 418	Thalman George H Ir	362* 418	Woods Alan Steel Company	540 367
Riter, Henry G., III Robertson, M. F. Robinson, C. B. Robinson, Ralph L.	304	Tholen, F. H.	240	Worthington Pump & Machinery Corp	545
Robinson, C. B	240*	Thomas, J. W.	419	Wright, Donald K	300
Robinson, Ralph L	704	Thompson, J. R.	178*	Wyandotte Chemicals Corp 240, 480,	763
Roche, J. E John A. 117	765 299	Timken Roller Bearing Company 419,	118* 541		
Roebling's Sons Company, John A117, Roebil, F. F.	475*	Torrant, J. W.	419	Vale & Towne Manufacturing Co	419
Rollins, J. Donald	236	Torrant, J. W	704	Yale & Towne Manufacturing Co	706*
Rolph, S. W.	116*	Trask, E. A. Traynham, A. C.	117		116
Rossmann, Peter F		Traynham, A. C. Trent, John H.	542 56*	Youngs, Harold C.	236
Rudolph, O. J. Runner, M. E.	419	Turco Products, Inc 477,	537	Youngstown Sheet & Tube Co 239.	364
Rust-Oleum Corporation	363	Turner, Paul	301	Younkin, John E	362
Ryerson, Anthony M	113	Turner, W. A.	301		
Ryerson, Joseph T., & Son	418	Tuthill, John M. Tway, Howard F. Twyman, Elmer F.	239	Zeller, M. A	115
		Twyman, Elmer F.	420 419	Zimmer, Horace	
SaLee, W. H	236	T-Z Railway Equipment Co	56		
SaLee, W. H. Santry, Joseph V.	238				
Schlass, J. J. Schleunnig, Robert H.	420				
Schieler, Albert M.	420 537*	Underwood, Robert P.	765		
Schmitt, John F.	420	Union Asbestos & Rubber Co 176, Union Carbide & Carbon	366	Supply Trade Notes—Obituaries	
Schneider, R. I.	762*	Corp 57, 118, 239, 418.	765		
Scott, H. O. Scott, Walter E.	418	Corp 57, 118, 239, 418, United States Steel Corp 541,	604	Armstrong Bishard	305
Scullin Steel Company	239 420	United States Steel Products Company	420	Armstrong, Richard Ashcraft, Alan E., Sr.	181
			475	Dalas D Families	
Sears, Burton C	706	United States Steel Supply Corp	17.5	Dales, D. Franklin	119
Sears, Burton C. Sedwick, T. D.	706 180*	Clined States Steel Supply Corp.	475	Bales, B. Franklin Blatchford, Carter	606
Sears, Burton C. Sedwick, T. D.	706 180*			Blatchford, Carter Bremser, A. T.	606 766
Sears, Burton C. Sedwick, T. D. Seim, Conrad Sein, Norman, W.	706 180* 545 420*	Valley Bearing & Equipment Co	602 300	Blatchford, Carter Bremser, A. T. Buck, John	606 766 242
Sears, Burton C. Sedwick, T. D. Seim, Conrad Sein, Norman, W.	706 180* 545 420*	Valley Bearing & Equipment Co	602 300 475*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A.	606 766 242 181
Sears, Burton C. Sedwick, T. D. Seim, Conrad Sein, Norman, W.	706 180* 545 420*	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L.	602 300 475* 419	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce	606 766 242 181 57 181
Sears, Burton C. Sedwick, T. D. Seim, Conrad Sein, Norman, W.	706 180* 545 420*	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L.	602 300 475* 419	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce	606 766 242 181 57 181
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D.	706 180* 545 420* 541 236 539* 419 764*	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America	602 300 475* 419	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H.	606 766 242 181 57 181 119 305
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sherre, A. D. Sheffer, John W. Sherk, R. W.	706 180* 545 420* 541 236 539* 419 764* 419	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478,	602 300 475* 419 541 420	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H.	606 766 242 181 57 181 119 305
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp.	706 180* 545 420* 541 236 539* 419 764* 419 174 237	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation	602 300 475* 419 541 420 762 363	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H.	606 766 242 181 57 181 119 305
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Sheehan, E. F. Sheehan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co.	706 180* 545 420* 541 236 539* 419 764* 419 174 237 472	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V.	602 300 475* 419 541 420 762 363 236*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P.	606 766 242 181 57 181 119 305 367* 707 304 181
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silsbec C. S.	706 180* 545 420* 541 236 539* 419 174* 419 174 237 472 174	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation	602 300 475* 419 541 420 762 363	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T.	606 766 242 181 57 181 119 305 367* 707 304 181 766
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Sheehan, E. F. Sheehan, E. F. Sheehan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. 178	706 180* 545 420* 541 236 539* 419 764* 419 174 237 472 174	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V.	602 300 475* 419 541 420 762 363 236* 602 56	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T.	606 766 242 181 57 181 119 305 367* 707 304 181 766
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Sheehan, E. F. Sheehan, E. F. Sheehan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. 178	706 180* 545 420* 541 236 539* 419 764* 419 174 237 472 174	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F.	602 300 475* 419 541 420 762 363 236* 602 56	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F.	606 766 242 181 57 181 119 305 367* 707 304 181 766 421 368 545
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Sheehan, E. F. Sheehan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp	706 180** 545 420** 541 236 539** 419 764* 419 174 237 472 174 761 544 763	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates	602 300 475* 419 541 420 762 363 236* 602 56 240	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hiddebrant, Otto R. Hoblitzelle, Harrison	606 766 242 181 57 181 119 305 367* 707 304 181 766 421 368 545 119
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Sheehan, E. F. Sheehan, E. F. Sheehan, W. M. Shere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. Sipp, Edward A. SKF Industries 56, 364 Smith, A. O., Corp.	706 180* 545 420* 541 236 539* 419 174 419 174 472 174 , 761 544 763 , 56	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc.	602 300 475* 419 541 420 762 363 236* 602 56 240	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hidebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L.	606 766 242 181 57 181 119 305 367* 707 304 117 666 421 368 545 119
Sears, Burton C. Sedwick, T. D. Seim, Conrad. Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. Sipp. Edward A. SKF Industries Smith, A. O., Corp. Smith, A. O., Corp. Smith, Marvin W.	706 180* 545 420* 541 236 539* 419 174 237 472 174 761 544 763 556 538	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Wallae, H. J. Wallae, H. J.	602 300 475* 419 541 420 762 363 236* 602 56 240	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hidebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W.	606 766 242 181 57 181 119 305 307 307 181 766 707 181 766 545 545 547 57 766
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Shere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. Sipp, Edward A. SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N.	706 180* 545* 420* 541 236 539* 419 764* 419 237 472 174 761 544, 763 538 538 363*	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Wallace, Percy H.	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hildebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I.	606 766 766 181 57 181 119 305 367 707 304 181 368 545 119 57 766 421 57 57 57
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Sheehan, E. F. Sheehan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp	706 180* 545* 420* 541 236 539* 419 764* 479 174 761 544 763 538 363* 176	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Waller, Percy H. Walpole, Robert H., Jr.	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hidebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F.	606 766 242 181 57 181 119 305 367* 707 304 181 766 421 368 545 547 766 305 766
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. Sipp, Edward A. SKF Industries Sipp, Edward A. SKF Industries Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D.	706 186* 545* 420* 420* 419 236 539* 419 764* 419 174 237 174 . 761 544 . 56 . 538* . 174 . 36 . 363* . 174	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Wallace, H. J. Waller, Percy H. Walpole, Robert H., Jr. Walsh, W. R.	602 300 475* 419 541 420 762 363 236* 602 240 480 542 604* 117* 765 303	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B, Healy, Walter F. Hildebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T.	606 766 766 181 57 181 119 305 307 304 181 368 545 119 368 545 119 57 766 305 766 305 766 305
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Sheehan, E. F. Sheehan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. 178 Sipp, Edward A. SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M.	706 186* 545* 420* 541 236 539* 419 764* 419 174 237 472 174 , 763 538 363* 174 766 303 3239*	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Waller, Percy H. Walpole, Robert H., Jr.	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hidebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Oueeney, Joseph A.	606 242 181 57 181 119 305 367 707 304 181 766 421 19 57 57 766 308 545 119 57 57 57 66 304 606
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. 178 Sipp, Edward A. SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns	706 188° 545 * 420* 541 236 * 419 764* 419 174 237 472 174 763 538 * 538 * 363 * 174 766 · 303 * 303 * 303 *	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hildebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Queeney, Joseph A. Schaff, Frederic A. 181,	606 766 766 181 57 181 119 305 367 707 304 181 368 545 119 57 766 421 368 545 119 57 766 421 421 426 427 427 427 427 427 427 427 427 427 427
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. 178 Sipp, Edward A. SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns	706 188° 545 * 420* 541 236 * 419 764* 419 174 237 472 174 763 538 * 538 * 363 * 174 766 · 303 * 303 * 303 *	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Waller, Percy H. Walpole, Robert H., Jr. Walsh, W. R. Wardley, Jr., G. P. Watson, Edmund A. Watters, James H. Waupe Equipment Co.	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hildebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Queeney, Joseph A. Schaff, Frederic A. 181, Sechrist, T. O.	606 766 242 181 57 181 119 305 367* 707 304 181 766 421 368 545 547 766 305 304 421 368 547 421 421
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Shefer, John W. Sheffer, John W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. Sipp, Edward A. SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns Speer & Co. Spenner, Fred H.	706 188° 545 * 420* 541 236 * 419 764* 419 174 237 472 174 763 538 * 538 * 363 * 174 766 · 303 * 303 * 303 *	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Wallace, H. J. Waller, Percy H. Walpole, Robert H., Jr. Walsh, W. R. Wardley, Jr., G. P. Watson, Edmund A. Watters, James H. Waugh Equipment Co.	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235 420	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hildebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Queeney, Joseph A. Schaff, Frederic A. Sechrist, T. O.	606 766 242 181 57 181 119 305 367 707 304 181 368 545 119 57 766 421 57 766 421 57 766 421 421 422 421 422 422 422
Sears, Burton C. Sedwick, T. D. Seim, Conrad. Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. Sipp. Edward A. SKF Industries Sipp. Edward A. SKF Industries Sipp. Edward A. SKF Industries Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns Speer & Co. Spenner, Fred H. Spicer Manufacturing Division, Dana	706 180* 545* 420* 545* 420* 419* 764* 419* 764* 472* 174* 237* 472* 174* 763* 538* 363* 174* 766* 303* 703* 705* 420	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Waller, Percy H. Walpole, Robert H., Jr. Walsh, W. R. Wardley, Jr., G. P. Watson, Edmund A. Watters, James H. Waupe Equipment Co.	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235 420 602*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hildebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Queeney, Joseph A. Schaff, Frederic A. 181, Sechrist, T. O.	606 766 242 181 57 181 119 305 367 707 304 121 368 545 547 57 766 305 306 306 306 306 306 306 306 306 306 306
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Shefer, John W. Sheffer, John W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. Sipp, Edward A. SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns Speer & Co. Spenner, Fred H.	706 180* 545* 420* 545* 420* 419* 764* 419* 764* 472* 174* 237* 472* 174* 763* 538* 363* 174* 766* 303* 703* 705* 420	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235 420 602*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hildebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Queeney, Joseph A. Schaff, Frederic A.	606 766 242 181 57 181 119 305 367 707 304 121 368 545 547 57 766 305 306 306 306 306 306 306 306 306 306 306
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Sismons-Boardman Publishing Corp. 178 Sipp, Edward A. SKF Industries 56, 364 SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns Speer, A. Burns Speer & Co. Spenner, Fred H. Spicer Manufacturing Division, Dana Corporation	706 186* 186* 545* 541* 236* 419* 174* 472* 174* 761* 544* 763* 564* 538* 174* 763* 544* 763* 544* 763* 545* 5	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Waller, Percy H. Walpole, Robert H., Jr. Walsh, W. R. Wardley, Jr., G. P. Watson, Edmund A. Watters, James H. Waugh Equipment Co. Webb, J. H. Webster, Gilbert E. S44. Weiffenbach, J. F.	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235 602* 479*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hildebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Oueeney, Joseph A. Schaff, Frederic A. Schaff, Frederic A. Schaff, Frederic A. Schaff, T. Wiemer, Ralph J.	606 766 242 181 57 181 119 305 367 707 304 121 368 545 547 57 766 305 306 306 306 306 306 306 306 306 306 306
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Sismons-Boardman Publishing Corp. 178 Sipp, Edward A. SKF Industries 56, 364 SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns Speer, A. Burns Speer & Co. Spenner, Fred H. Spicer Manufacturing Division, Dana Corporation	706 186* 186* 545* 541* 236* 419* 174* 472* 174* 761* 544* 763* 564* 538* 174* 763* 544* 763* 544* 763* 545* 5	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Wallace, H. J. Waller, Percy H. Walpole, Robert H., Jr. Walsh, W. R. Wardley, Jr., G. P. Watson, Edmund A. Watters, James H. Waugh Equipment Co. Webb, J. H. Webster, Gilbert E. S44, Weiffenbach, J. F.	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235 420 602* 479*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hidebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Queeney, Joseph A. Schaff, Frederic A. Schaff, Frederic A. Schaff, Frederic A. Schaff, T. Welch, Harold F. Wiemer, Ralph J.	606 766 242 181 57 181 119 305 367* 707 304 1766 421 368 545 547 766 305 766 306 767 2421 297 368 606
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. 178 Sipp, Edward A. SKF Industries 56, 364 SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns Speer, A. Burns Speer & Co. Spenner, Fred H. Spicer Manufacturing Division, Dana Corporation The inclusive page	706 186* 186* 545* 541* 236* 419* 174* 472* 174* 761* 544* 763* 564* 538* 174* 763* 544* 763* 544* 763* 545* 5	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Waller, Percy H. Walpole, Robert H., Jr. Walsh, W. R. Wardley, Jr., G. P. Watson, Edmund A. Watters, James H. Waugh Equipment Co. Webb, J. H. Webster, Gilbert E. Weiffenbach, J. F.	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235 420 479*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hildebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Queeney, Joseph A. Schaff, Frederic A. Schaff, Frederic A. Schaff, Frederic A. Schaff, T. Wiemer, Ralph J.	606 766 766 242 181 57 181 119 305 367* 707 304 421 368 545 119 57 766 305 368 545 119 57 57 57 66 304 606 606
Sears, Burton C. Sedwick, T. D. Seim, Conrad. Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Shefer, John W. Sheffer, John W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. 178 Sipp, Edward A. SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns Speer, A. Burns Speer, Fred H. Spicer Manufacturing Division, Dana Corporation The inclusive page	706 180* 180* 545* 420* 419 174 237 472 174 763 538 363* 174 766 303 239* 705* 765 420 477	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Wallace, H. J. Waller, Percy H. Walpole, Robert H., Jr. Walsh, W. R. Wardley, Jr., G. P. Watson, Edmund A. Watters, James H. Waugh Equipment Co. Webb, J. H. Webster, Gilbert E. Soft each 1950 issue of Railway Mechanical and May 2 June 3	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235 420 602* 479*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hidebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Queeney, Joseph A. Schaff, Frederic A. Schaff, Frederic A. Schaff, Frederic A. Schaff, T. Welch, Harold F. Wiemer, Ralph J.	606 766 766 242 181 57 181 119 305 367* 707 304 421 368 545 119 57 766 305 368 545 119 57 57 57 66 304 606 606
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Sheere, A. D. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. 178 Sipp, Edward A. SKF Industries 56, 364 SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns Speer, A. Burns Speer & Co. Spenner, Fred H. Spicer Manufacturing Division, Dana Corporation The inclusive page	706 186* 186* 545* 541* 236* 419* 174* 472* 174* 761* 544* 763* 56* 538* 174* 761* 544* 763* 56* 538* 174* 765* 765* 765* 765* 420* 477* 477* 477* 477* 477* 477* 474* 474* 475* 474* 474* 475* 475* 476* 477	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235 420 419* 479* 479*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hidebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Oueeney, Joseph A. Schaff, Frederic A. Schaff, Frederic A. Schaff, Frederic A. Schaff, T. Duff Welch, Harold F. Wiemer, Ralph J.	606 766 766 242 181 57 181 119 305 367* 707 304 421 368 545 119 57 766 305 368 545 119 57 57 57 66 304 606 606
Sears, Burton C. Sedwick, T. D. Seim, Conrad Seip, Norman, W. Selby, A. Paul Seyer, C. F. Shechan, E. F. Shechan, W. M. Shefer, John W. Sheffer, John W. Sherk, R. W. Shippers' Car Line Corp. Silent Hoist & Crane Co. Silsbee, C. S. Simmons-Boardman Publishing Corp. Sipp, Edward A. SKF Industries 56, 364 Smith, A. O., Corp. Smith, Marvin W. Smith, Thomas H. Snyder, T. N. Socony-Vacuum Oil Company Sowers, Robert D. Spangler, J. M. Sparks, Hynes Speer, A. Burns Speer & Co. Spenner, Fred H. Spicer Manufacturing Division, Dana Corporation The inclusive page	706 180* 545* 420* 419 174 472 174 472 174 763 538 363* 174 763 239* 765 765 420 477	Valley Bearing & Equipment Co. Valve Pilot Corporation Van Cleave, Paul C. Van DerKar, A. L. Van Meter, Roy J. Vanadium Corporation of America Vapor Car Heating Corporation 174, 299, 420, 478, Vaughan, K. A. Villette, V. Volkmann, Dr. E. W. Vonier, L. F. Voss, P. W., & Associates Waite, J. P., Inc. Walla, H. J. Wallace, H. J. Wallace, H. J. Waller, Percy H. Walpole, Robert H., Jr. Walsh, W. R. Wardley, Jr., G. P. Watson, Edmund A. Watters, James H. Waugh Equipment Co. Webb, J. H. Webster, Gilbert E. Soft each 1950 issue of Railway Mechanical and May 2 June 3	602 300 475* 419 541 420 762 363 236* 602 56 240 480 542 604* 117* 765 303 420 419* 366 235 420 419* 479* 479*	Blatchford, Carter Bremser, A. T. Buck, John Carse, Robert A. Clements, B. A. Cooper, Sidney Bruce Costella, Maurice Coyle, Walter H. Deems, John F., III Duggan, Leo P. Fischer, Frederick J. Forss, Fred P. Hanna, William T. Hartman, F. B. Healy, Walter F. Hidebrant, Otto R. Hoblitzelle, Harrison Hoffman, John L. Hood, Francis James Kavanagh, Edward W. Lipetz, Alphonse I. Lowman, Harry F. Mulchay, E. T. Pope, Henry F. Ouceney, Joseph A. Schaff, Frederic A. Schaff, Frederic A. Sechrist, T. O. Smith, T. Duff Welch, Harold F. Wiemer, Ralph J.	606 766 242 181 57 181 119 305 367 707 304 421 368 545 57 766 305 767 421 297 421 297 421 297 421 297 421 297 421 297 421 297 421 297 421 421 421 421 421 421 421 421 421 421

* Indicates photograph.